					ST DEPARTMENT DIVISION O	OF NA					AMEN	FC IDED REPC	ORM 3		
		APP	LICATION	FOR P	PERMIT TO DRILI	L				1. WELL NAME and NUMBER GMBU C-31-8-17					
2. TYPE (	OF WORK	RILL NEW WELL ((	REENT	ER P&A	WELL DEEPE	EN WELL				3. FIELD OR WILDCAT MONUMENT BUTTE					
4. TYPE (	OF WELL	Oil			Methane Well: NO					5. UNIT or COMMU		TION AGR (GRRV)	EEMENT	NAME	
6. NAME	OF OPERATOR	2								7. OPERATOR PHON	NE	, ,			
8. ADDRI	ESS OF OPERA				TON COMPANY					435 646-4825 9. OPERATOR E-MAIL					
10. MINE	RAL LEASE N	UMBER	Rt 3 Box 363		ton, UT, 84052 11. MINERAL OWNE	ERSHIP	•			12. SURFACE OWN		newfield.co	m		
	L, INDIAN, OF				477	DIAN (	) STATE (	) FEE(	0		DIAN 🛑	STATI		FEE 🔵	
13. NAMI	E OF SURFACE	OWNER (if box :	12 = 'fee')							14. SURFACE OWNE	ER PHO	NE (if box	12 = 'fe	ee')	
15. ADDF	RESS OF SURF	ACE OWNER (if b	ox 12 = 'fee	e')						16. SURFACE OWN	ER E-MA	AIL (if box	12 = 'f	ee')	
		OR TRIBE NAME			18. INTEND TO COM		LE PRODUCT	ION FROM	1	19. SLANT					
(if box 1	2 = 'INDIAN')				477		gling Applicati	on) NO (	D)	VERTICAL DIR	RECTION	AL 📵	HORIZON	NTAL 🔵	
20. LOC	ATION OF WE	LL		FOO'	TAGES	QT	TR-QTR	SECT	ION	TOWNSHIP	R	ANGE	МЕ	RIDIAN	
LOCATI	ON AT SURFAC	CE	7	11 FSL	1936 FWL	9	SESW	30		8.0 S	1	7.0 E		S	
Top of U	Jppermost Pro	ducing Zone	2	22 FSL	2380 FWL	9	SESW	30		8.0 S 1		7.0 E		S	
At Total	At Total Depth 247 FNL				2401 FEL	N	NWNE	31		8.0 S	1	7.0 E		S	
21. COUNTY DUCHESNE  22. DISTANCE TO NEAREST LEASE LINE (Feet) 2401									23. NUMBER OF AC		<b>DRILLING</b>	UNIT			
25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)									L	<b>26. PROPOSED DEP</b>	<b>TH</b> : 6545	TVD: 65	45		
27. ELEV	ATION - GROU	9,	20			29. SOURCE OF DR									
		5303				WYB0	000493			WATER RIGHTS AP		L <b>NUMBER</b> 7478	IF APP	LICABLE	
					Hole, Casing,		_		1						
String	Hole Size	Casing Size	Length	Weig			Max Mu			Cement		Sacks	Yield	Weight	
Surf Prod	12.25 7.875	8.625 5.5	0 - 300 0 - 6545	24. 15.			8.3		Prem	Class G nium Lite High Stre	nath	138 314	3.26	15.8 11.0	
1100	7.073	3.3	0 03 13	13.	.5 552.		0.5		11011	50/50 Poz		363	1.24	14.3	
					Α.	ттасн	IMENTS	<u> </u>							
	VERIFY T	HE FOLLOWIN	G ARE ATT	ACHE	D IN ACCORDAN	ICE WI	ITH THE UT	AH OIL	AND G	GAS CONSERVATI	ON GE	NERAL F	RULES		
<b>✓</b> w	ELL PLAT OR	MAP PREPARED E	BY LICENSE	SURV	EYOR OR ENGINEE	R	<b>№</b> сом	PLETE DR	ILLING	PLAN					
AF	FIDAVIT OF S	TATUS OF SURFA	CE OWNER	AGREE	MENT (IF FEE SURF	ACE)	FORM	5. IF OPI	ERATOI	R IS OTHER THAN TI	HE LEAS	SE OWNER	₹		
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)								GRAPHIC	AL MAI	•					
NAME Mandie Crozier TITLE Regulatory Tech									PHO	NE 435 646-4825					
SIGNAT	URE				<b>DATE</b> 05/06/2011				EMAI	<b>L</b> mcrozier@newfield.	com				
	MBER ASSIGN 01350741(				APPROVAL				B	10 juli					
										ermit Manager					

# NEWFIELD PRODUCTION COMPANY GMBU C-31-8-17 AT SURFACE: SE/SW SECTION 30, T8S, R17E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

 Uinta
 0' – 1595'

 Green River
 1595'

 Wasatch
 6325'

 Proposed TD
 6545'

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation (Oil) 1595' – 6325'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature

Hardness pH

Water Classification (State of Utah)

Dissolved Calcium (Ca) (mg/l)

Dissolved Iron (Fe) (ug/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Carbonate (CO<sub>3</sub>) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l)

Dissolved Sulfate (SO<sub>4</sub>) (mg/l)

Dissolved Total Solids (TDS) (mg/l)

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: GMBU C-31-8-17

Size	Interval		Weight	Grade	Coupling	Design Factors			
Size	Тор	Bottom	vveigni	Grade	Couping	Burst	Collapse	Tension	
Surface casing	0'	300'	24.0	J-55	STC	2,950	1,370	244,000	
8-5/8"	U	300	24.0			17.53	14.35	33.89	
Prod casing	0'	6.545'	45.5	1.55	1.70	4,810	4,040	217,000	
5-1/2"	U	6,545	15.5	J-55	LTC	2.31	1.94	2.14	

#### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU C-31-8-17

Job	Fill	Description	Sacks ft <sup>3</sup>	OH Excess*	Weight (ppg)	Yield (ft³/sk)	
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17	
- Curiado dading	000	51000 5 W 270 5001	161	0070	10.0		
Prod casing	4,545'	Prem Lite II w/ 10% gel + 3%	314	30%	11.0	3.26	
Lead	4,545	KCI	1024	30%	11.0	3.26	
Prod casing	2,000'	50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24	
Tail	2,000	KCI	451	30%	14.5	1.24	

<sup>\*</sup>Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit** C for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to  $\pm 350$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED</u>:

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

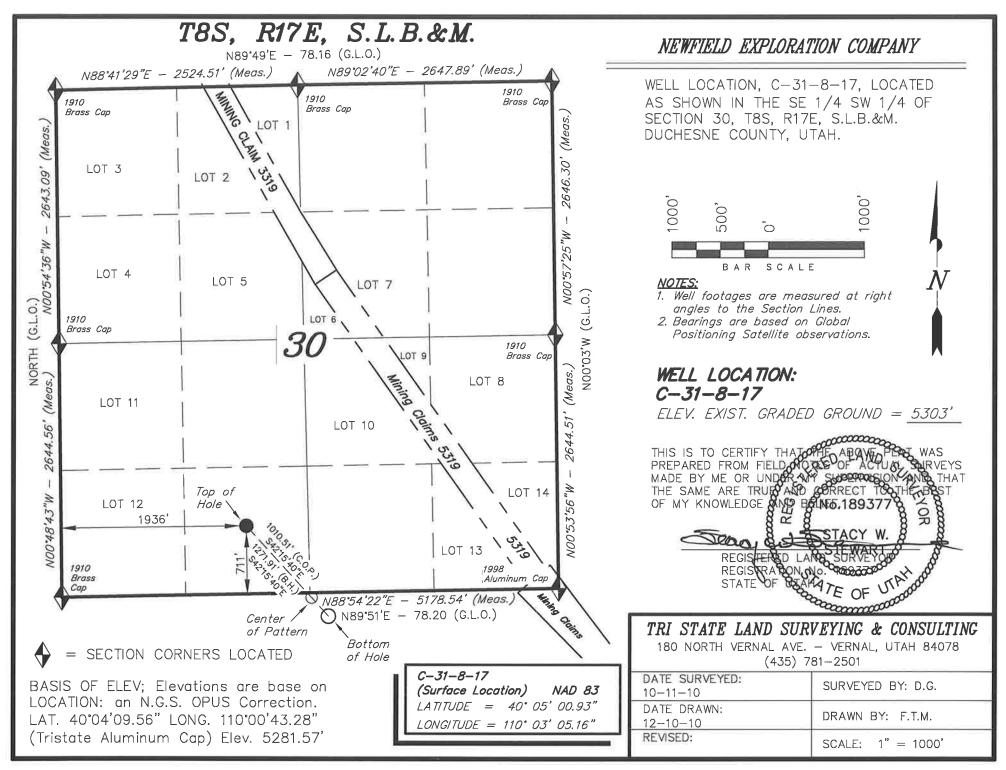
The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

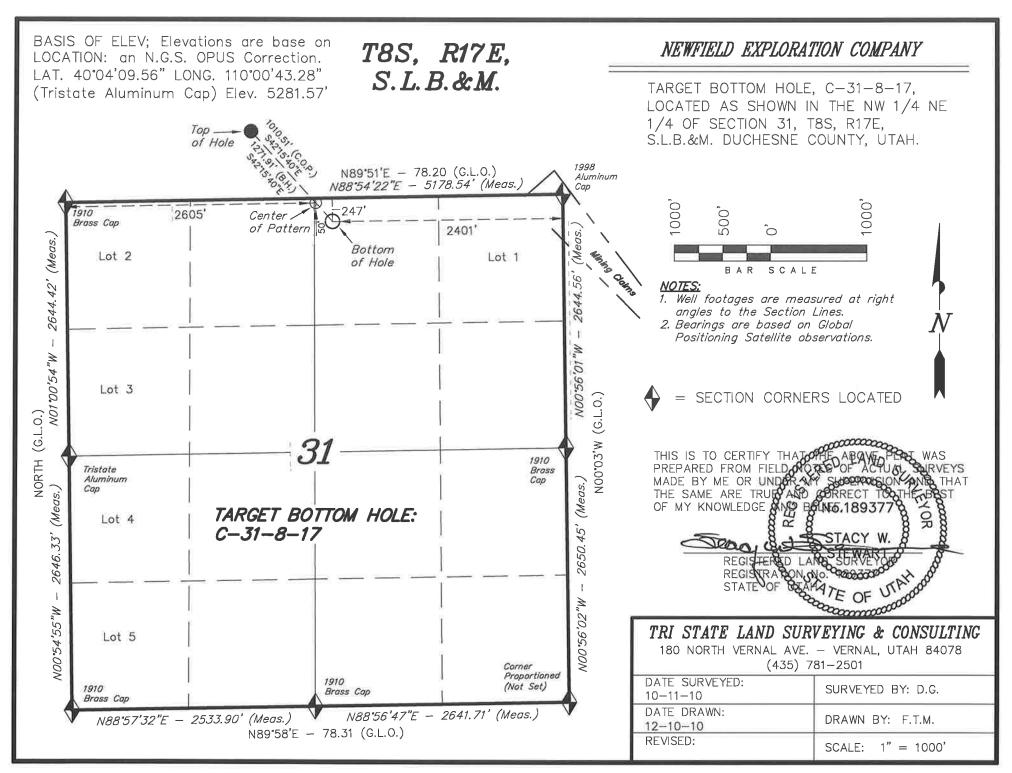
#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

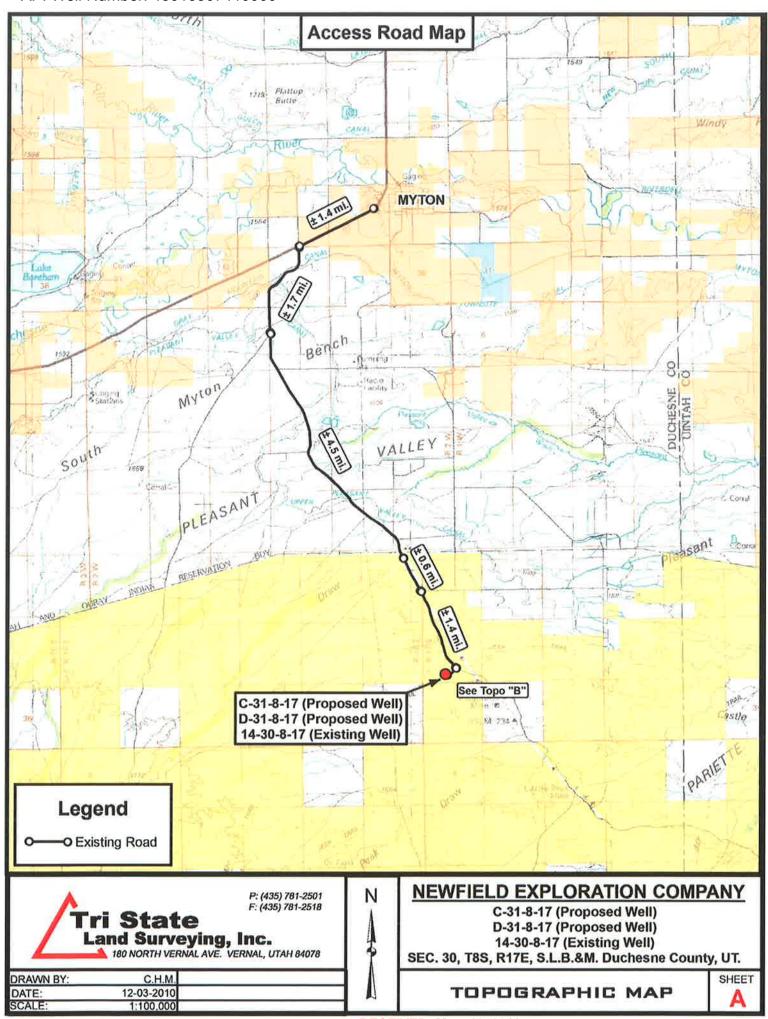
No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

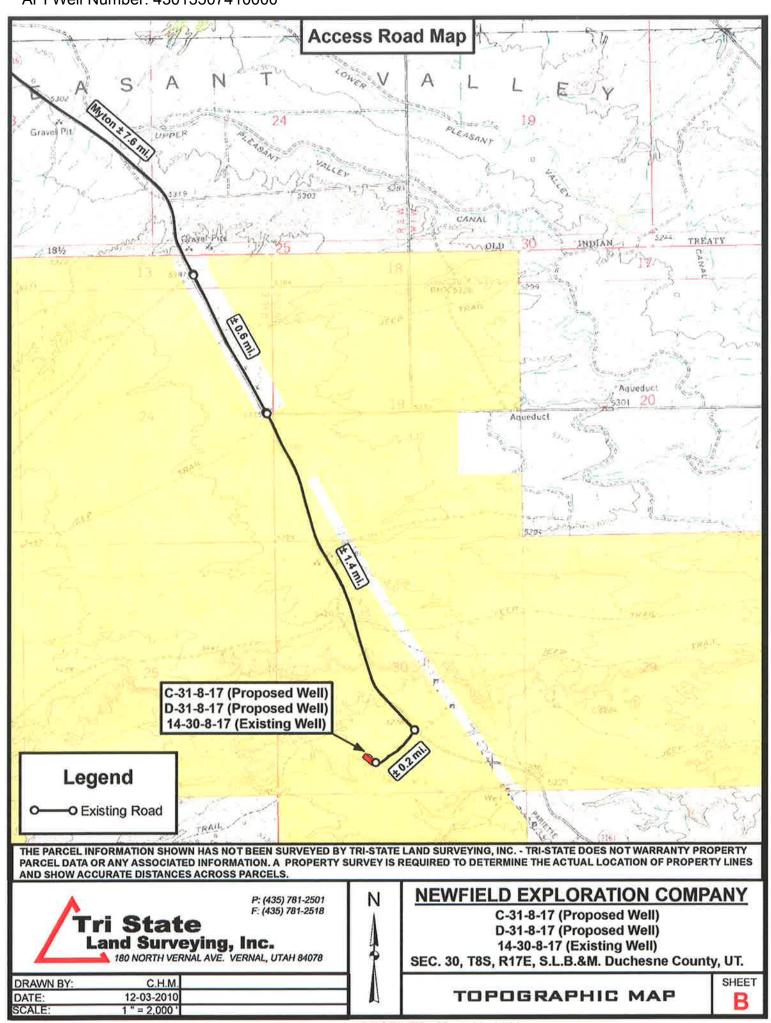
# 10. <u>ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:</u>

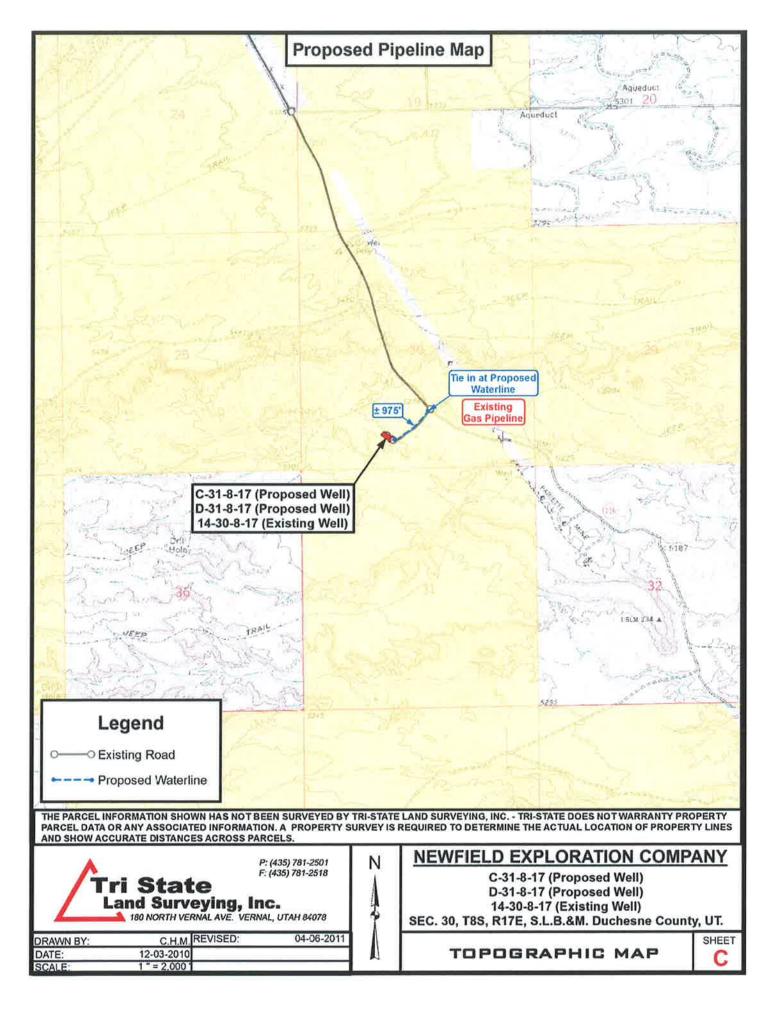
It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

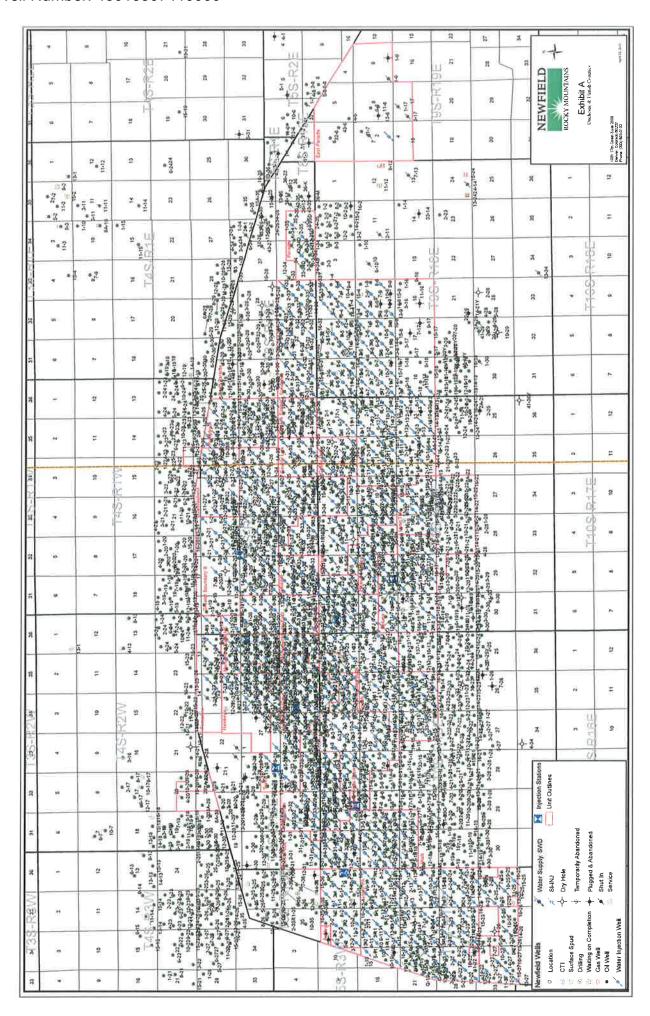


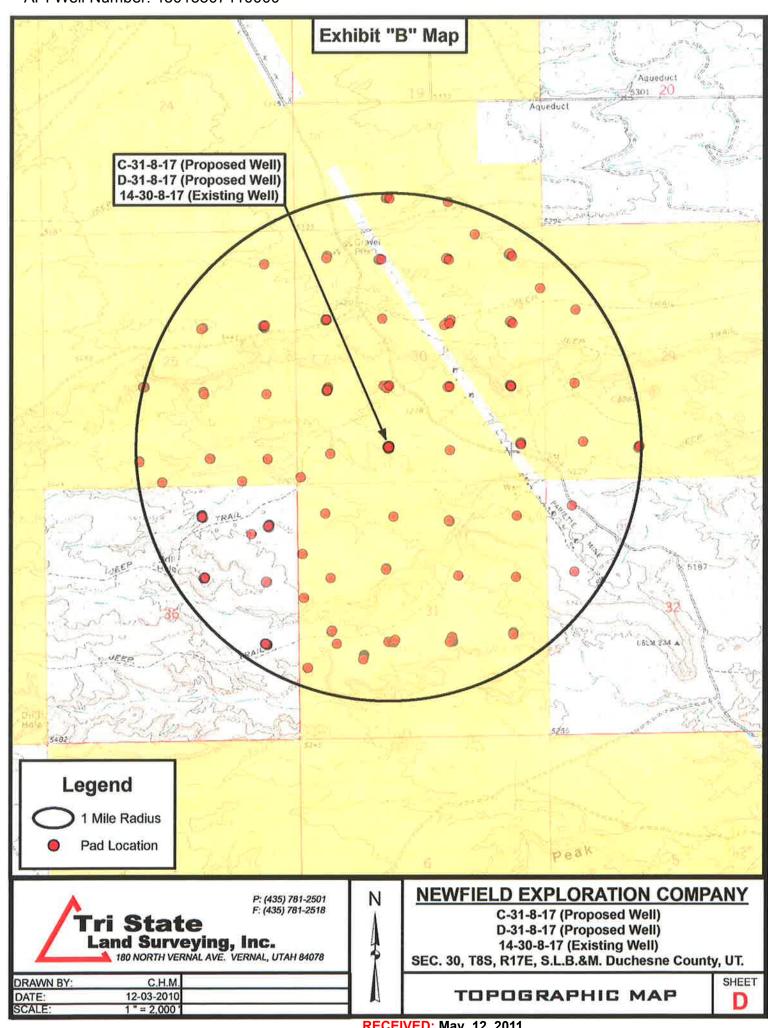














# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 31 T8S R17E C-31-8-17

Wellbore #1

Plan: Design #1

# Standard Planning Report

09 December, 2010





# PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: Site:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT) SECTION 31 T8S R17E

C-31-8-17 Wellbore #1 Design #1

Local Co-ordinate Reference:

**TVD Reference: MD** Reference:

North Reference: **Survey Calculation Method:**  Well C-31-8-17

C-31-8-17 @ 5315,0ft (Newfield Rig) C-31-8-17 @ 5315.0ft (Newfield Rig)

True

Minimum Curvature

Design: **Project** 

Site

Wellbore:

Well:

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983

Utah Central Zone

System Datum:

Mean Sea Level

0.0 ft

SECTION 31 T8S R17E, SEC 31 T8S R17E

Site Position: From:

Lat/Long

Northing: Easting:

7,199,169.00 ft 2,048,214,00 ft Latitude: Longitude: **Grid Convergence:** 

40° 4' 28.063 N 110° 2' 33,522 W

0.93°

Position Uncertainty:

+E/-W

Slot Radius:

Well **Well Position** 

C-31-8-17, SHL LAT: 40 05 00.93 LONG: -110 03 05.16 +N/-S 3,325.5 ft

Northing: Easting:

7,202,454,20 ft 2,045,701,24 ft Latitude: Longitude:

40° 5' 0.930 N 110° 3' 5,160 W

**Position Uncertainty** 

-2,459.2 ft 0:0 ft

Wellhead Elevation:

5,315.0 ft

**Ground Level:** 

5,303.0 ft

Wellbore Wellbore #1

Magnetics **Model Name** Sample Date IGRF2010 2010/12/09

Declination (°) 11.38 Dip Angle (°)

Field Strength (nT)

52,346

Design

**Audit Notes:** 

Version: Phase:

Design #1

PROTOTYPE

Tie On Depth:

0.0

65,84

**Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 5,300.0 0.0 137.74 0.0

lan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,491.2	13.37	137.74	1,483.1	-76.6	69.6	1.50	1.50	0.00	137.74	
5,414.4	13.37	137.74	5,300.0	-747.9	679.6	0.00	0.00	0.00	0,00	C-31-8-17
6,545.0	13.37	137-74	6.400-0	-941.3	855.4	0.00	0.00	0.00	0.00	



# PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: Site: EDM 2003,21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

SECTION 31 T8S R17E C-31-8-17

 Well:
 C-31-8-17

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well C-31-8-17

C-31-8-17 @ 5315.0ft (Newfield Rig) C-31-8-17 @ 5315.0ft (Newfield Rig)

True

Minimum Curvature

sign:	Design #1								
anned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100_0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0,00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0						
400,0	0.00	0,00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500,0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1,50	137.74	700.0	-1.0	0.9	1.3	1.50	1.50	0.00
800.0	3.00	137.74	799.9	-3.9	3,5	5.2	1,50	1.50	0.00
900.0	4.50	137.74	899.7	-8.7	7.9	11.8	1,50	1,50	0.00
1,000.0	6.00	137,74	999.3	-15.5	14.1	20.9	1,50	1,50	0.00
1,100.0	7.50	137.74		-24.2	22.0				
			1,098.6			32.7	1.50	1.50	0.00
1,200.0	9.00	137.74	1,197.5	-34.8	31.6	47.0	1.50	1.50	0.00
1,300.0	10.50	137.74	1,296.1	-47.3	43.0	64.0	1.50	1.50	0.00
1,400.0	12.00	137.74	1,394.2	-61.8	56.1	83.5	1,50	1.50	0.00
4 404 0	40.07	407.74	4 400 4	70.0		400 5	4.50	4.55	
1,491.2	13.37	137.74	1,483.1	-76.6	69.6	103.5	1,50	1.50	0.00
1,500.0	13.37	137.74	1,491.7	-78,1	71.0	105.5	0.00	0.00	0.00
1,600.0	13,37	137,74	1,589.0	-95.2	86.5	128,6	0.00	0.00	0.00
1,700.0	13.37	137.74	1,686.3	-112.3	102.1	151.8	0.00	0.00	0.00
1,800.0	13.37	137.74	1,783.6	-129.4	117.6	174.9	0.00	0,00	0.00
1,00010	10,01	107.74	1,700,0	12017	117.0	117.5	0,00	0,00	0.00
1,900.0	13.37	137.74	1,880.9	-146.5	133.2	198.0	0.00	0.00	0.00
2,000.0	13.37	137.74	1,978.2	-163.7	148.7	221.1	0.00	0.00	0.00
2,100.0	13.37	137.74	2,075.4	-180.8	164,3	244.2	0,00	0.00	0.00
2,200.0	13.37	137.74	2,172.7	-197.9	179.8	267.4	0.00	0.00	0.00
2,300.0	13.37	137.74	2,270.0	-215.0	195.4	290.5	0.00	0.00	0.00
2,400.0	13.37	137,74	2,367.3	-232.1	210.9	313.6	0.00	0.00	0.00
2,500.0	13.37	137.74	2,464.6	-249.2	226.4	336.7	0.00	0.00	0.00
·									
2,600.0	13.37	137.74	2,561.9	-266.3	242.0	359.8	0.00	0.00	0.00
2,700.0	13.37	137.74	2,659.2	-283.4	257.5	383.0	0.00	0.00	0.00
2,800.0	13.37	137.74	2,756.5	-300.5	273.1	406.1	0.00	0.00	0.00
2,900.0	42.27	137,74	0.052.0	047.7	000.0	400.0	0.00	0.00	0.00
	13,37		2,853.8	-317.7	288.6	429.2	0.00	0.00	0.00
3,000.0	13.37	137.74	2,951.1	-334.8	304.2	452.3	0.00	0.00	0.00
3,100.0	13,37	137.74	3,048.3	-351.9	319.7	475.4	0.00	0,00	0.00
3,200.0	13.37	137.74	3,145.6	-369.0	335.3	498.6	0.00	0.00	0.00
3,300.0	13.37	137.74	3,242.9	-386.1	350.8	521.7	0.00	0.00	0.00
3,400.0	13.37	137.74	3,340,2	-403.2	366.4	544.8	0.00	0.00	0.00
3,500.0	13.37	137.74	3,437.5	-420.3	381,9	567,9	0.00	0.00	0.00
3,600.0	13,37	137.74	3,534.8	-437.4	397.5	591.0	0.00	0.00	0.00
3,700.0	13.37	137.74	3,632,1	-454.5	413.0	614.2	0.00	0.00	0.00
3,800.0	13.37	137,74	3,729.4	-471.7	428.6	637.3	0.00	0.00	0.00
-			0,720.7	41.191		337.3		0.00	0.00
3,900.0	13.37	137,74	3,826.7	-488.8	444.1	660.4	0.00	0.00	0.00
4,000.0	13.37	137.74	3,924.0	-505.9	459.7	683.5	0.00	0.00	0.00
4,100.0	13.37	137.74	4,021.3	-523.0	475.2	706,6	0.00	0.00	0.00
4,200.0	13.37	137.74	4,118.5	-540.1	490.8	729.8	0.00	0.00	0.00
4,300.0	13.37	137.74	4,215.8	-557.2	506.3	752.9	0.00	0.00	0.00
4,400.0	13.37	137.74	4,313,1	-574.3	521.9	776.0	0.00	0.00	0.00
4,500.0	13.37	137.74	4,410.4	-591.4	537.4	799.1	0.00	0.00	
									0.00
4,600.0	13.37	137.74	4,507.7	-608.5	552.9	822.2	0.00	0.00	0.00
4,700.0	13.37	137.74	4,605.0	-625.6	568.5	845.4	0.00	0.00	0.00
4,800.0	13.37	137.74	4,702.3	-642.8	584.0	868.5	0.00	0.00	0.00
4 000 0	40.0**	407.74	4 700 0						
4,900.0	13.37	137.74	4,799.6	-659.9	599.6	891.6	0.00	0.00	0100
5,000.0	13.37	137.74	4,896.9	-677.0	615.1	914.7	0.00	0.00	0.00
5,100.0	13.37	137.74	4,994.2	-694.1	630.7	937.8	0.00	0.00	0.00
5,200.0	13.37	137.74	5,091.5	-711.2	646.2	961.0	0.00	0.00	0.00



# PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: Site:

Well:

Wellbore:

Design:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT) SECTION 31 T8S R17E

C-31-8-17 Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: Survey Calculation Method: Well C-31-8-17 C-31-8-17 @ 53

C-31-8-17 @ 5315.0ft (Newfield Rig) C-31-8-17 @ 5315.0ft (Newfield Rig)

True

Minimum Curvature

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
5,300.0	13.37	137,74	5,188.7	-728.3	661.8	984.1	0.00	0,00	0.00
5,400.0	13.37	137.74	5,286.0	-745.4	677.3	1,007.2	0.00	0.00	0.00
5,414.4	13.37	137.74	5,300.0	-747.9	679.6	1,010.5	0.00	0.00	0.00
C-31-8-17									
5,500.0	13.37	137.74	5,383.3	-762.5	692.9	1,030.3	0.00	0.00	0.00
5,600.0	13.37	137.74	5,480.6	-779.6	708.4	1,053.4	0.00	0.00	0.00
5,700.0	13,37	137.74	5,577.9	-796.8	724.0	1,076,6	0.00	0.00	0,00
5,800.0	13.37	137,74	5,675.2	-813.9	739.5	1,099.7	0.00	0.00	0.00
5,900.0	13.37	137.74	5,772:5	-831.0	755.1	1,122.8	0.00	0.00	0.00
6,000.0	13.37	137.74	5,869.8	-848.1	770.6	1,145.9	0.00	0.00	0.00
6,100.0	13.37	137.74	5,967.1	-865.2	786.2	1,169.0	0.00	0.00	0.00
6,200.0	13.37	137.74	6,064.4	-882.3	801.7	1,192,1	0.00	0.00	0.00
6,300.0	13.37	137.74	6,161.7	-899.4	817.3	1,215.3	0.00	0.00	0.00
6,400.0	13.37	137.74	6,258.9	-916.5	832.8	1,238.4	0.00	0.00	0.00
6,500.0	13,37	137,74	6,356.2	-933.6	848.4	1,261.5	0.00	0.00	0.00

Targets									
Target Name - hlt/miss target - Shape	Dip Angle	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
C-31-8-17 - plan hits target - Circle (radius 75.0)	0,00	0.00	5,300.0	-747.9	679.6	7,201,717.42	2,046,392.83	40° 4' 53.538 N	110° 2' 56.417 W



Project: USGS Myton SW (UT) Site: SECTION 31 T8S R17E

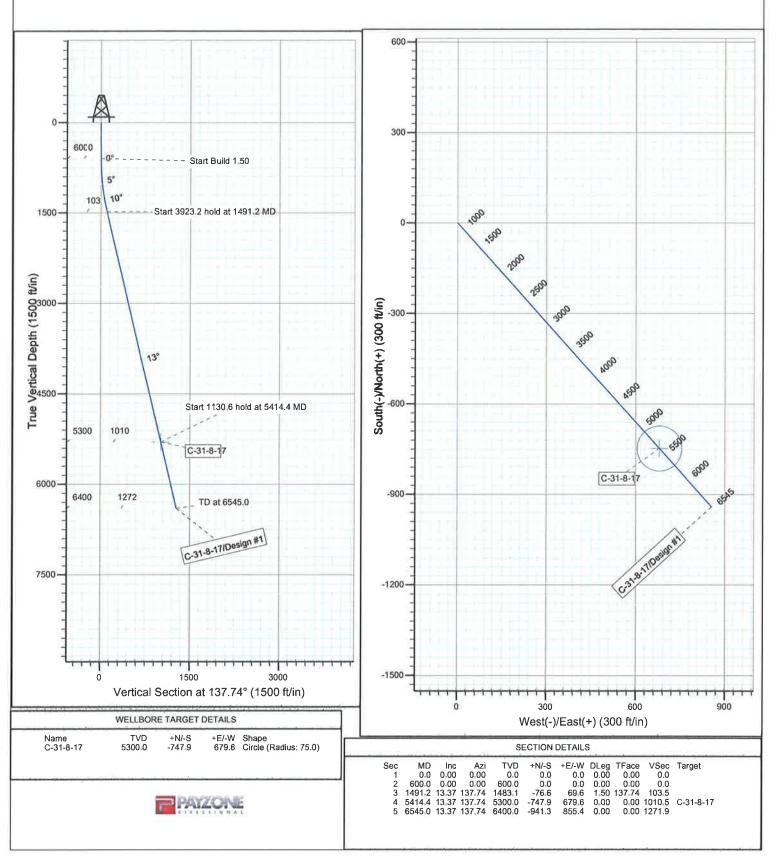
Well: C-31-8-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.38°

Magnetic Field Strength: 52345.5snT Dip Angle: 65.84° Date: 2010/12/09 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



# NEWFIELD PRODUCTION COMPANY GMBU C-31-8-17 AT SURFACE: SE/SW SECTION 30, T8S, R17E DUCHESNE COUNTY, UTAH

#### ONSHORE ORDER NO. 1

## <u>MULTI-POINT SURFACE USE & OPERATIONS PLAN</u>

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU C-31-8-17 located in the SE 1/4 SW 1/4 Section 30, T8S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed in a southeasterly direction -8.2 miles  $\pm$  to it's junction with an existing dirt road to the southwest; proceed in a southwesterly direction -0.2 miles  $\pm$  to the beginning of the access road to the existing 14-30-8-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

## 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 14-30-8-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

# 3. <u>LOCATION OF EXISTING WELLS</u>

Refer to Exhibit "B".

## 4. <u>LOCATION OF EXISTING AND/OR PROPOSED FACILITIES</u>

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond

Water Right: 43-11787

Newfield Collector Well

Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. <u>SOURCE OF CONSTRUCTION MATERIALS</u>

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. <u>ANCILLARY FACILITIES</u>

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

#### **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

#### b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

# 11. <u>SURFACE OWNERSHIP</u> – Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #09-148, 12/14/09. Paleontological Resource Survey prepared by, Wade E. Miller, 8/14/09. See attached report cover pages, Exhibit "D".

Newfield Production Company requests 975' of buried water line to be granted for the proposed GMBU C-31-8-17.

It is proposed that the disturbed area will be 30' wide to allow for construction of the proposed buried 10" steel water injection line and a buried 3" poly water return line. The proposed buried water lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** The proposed water pipelines will be buried in a 4-5' deep trench constructed with a trencher or backhoe for the length of the proposal. The equipment will run on the surface and not be flat bladed to minimize surface impacts to precious topsoil in these High Desert environments. If possible, all proposed surface gas pipelines will be installed on the same side of the road as existing gas lines. The construction phase of the proposed water lines will last approximately (5) days.

In the event that the proposed well is converted to a water injection well, a Sundry Notice 3160-5 form will be applied for through the Bureau of Land Management field office.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed GMBU C-31-8-17 was on-sited on 2/2/11. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), and Suzanne Grayson (Bureau of Land Management).

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU C-31-8-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU C-31-8-17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:

Representative

Name: Tim Eaton

Address: Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone: (435) 646-3721

#### Certification

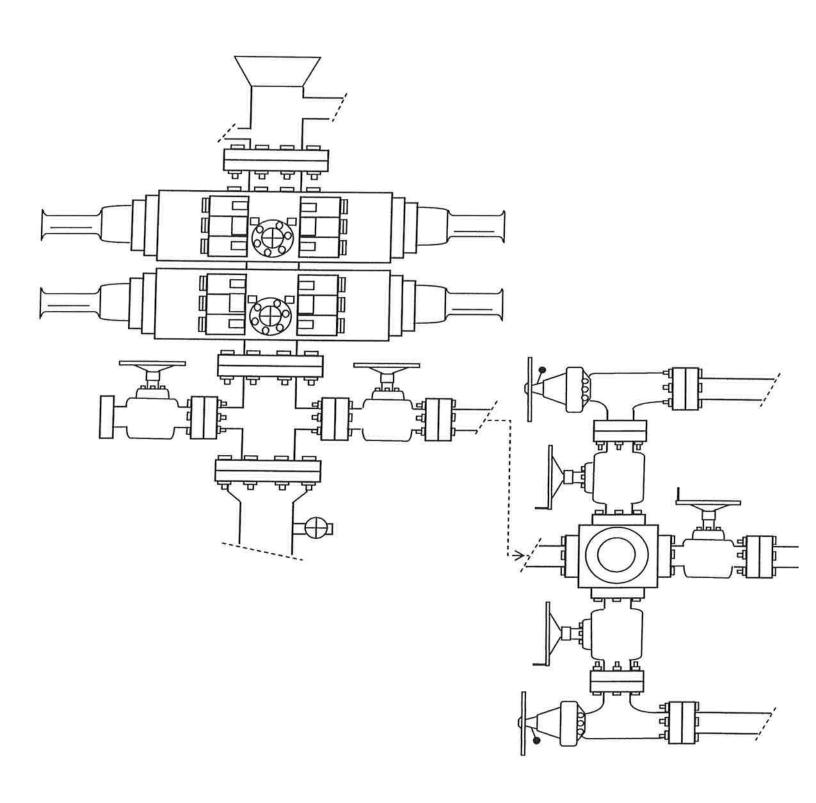
Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #C-31-8-17, Section 30, Township 8S, Range 17E: Lease UTU-74869 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

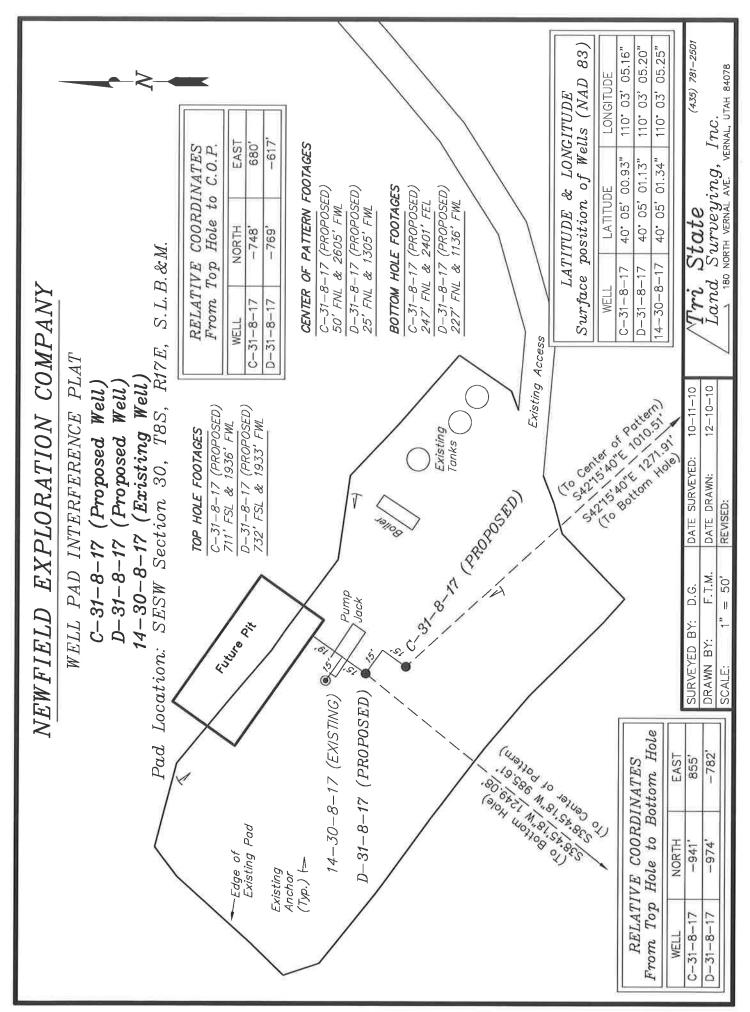
5/6/11	
Date	Mandie Crozier
	Regulatory Specialist
	Newfield Production Company

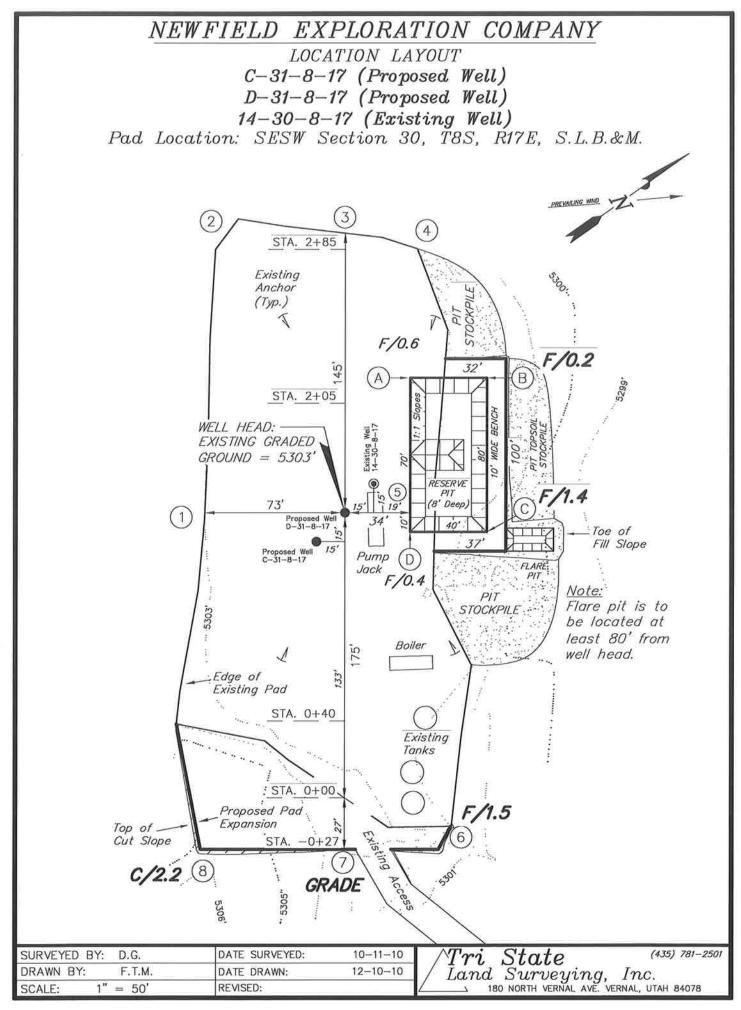
2-M SYSTEM

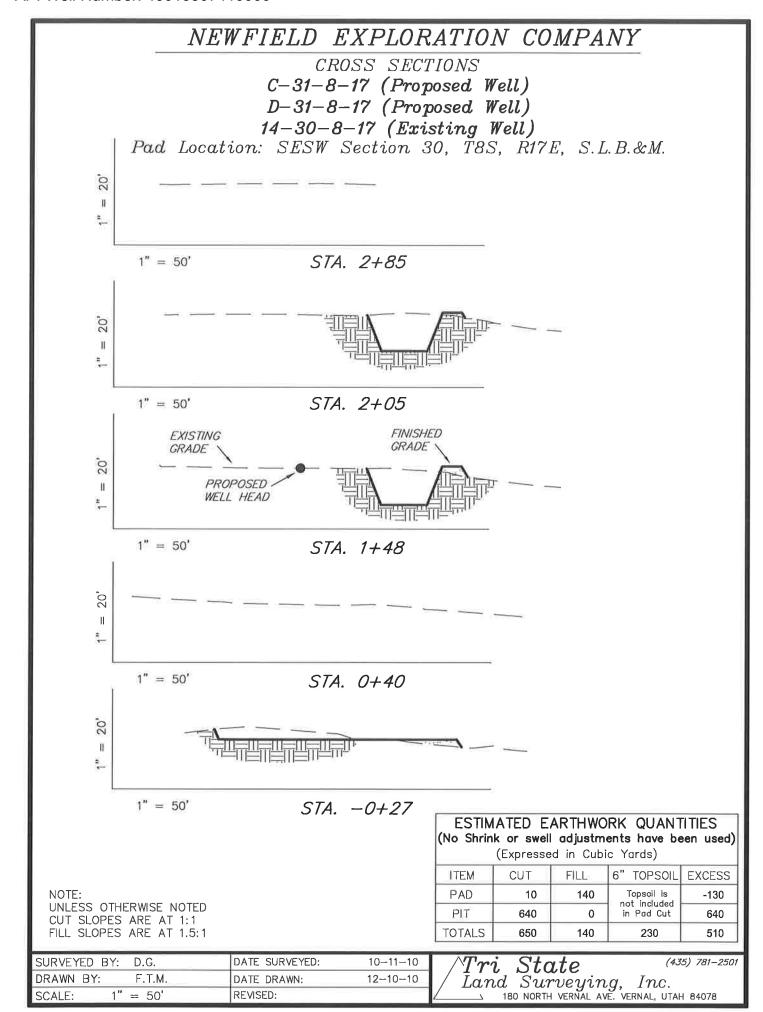
Blowout Prevention Equipment Systems

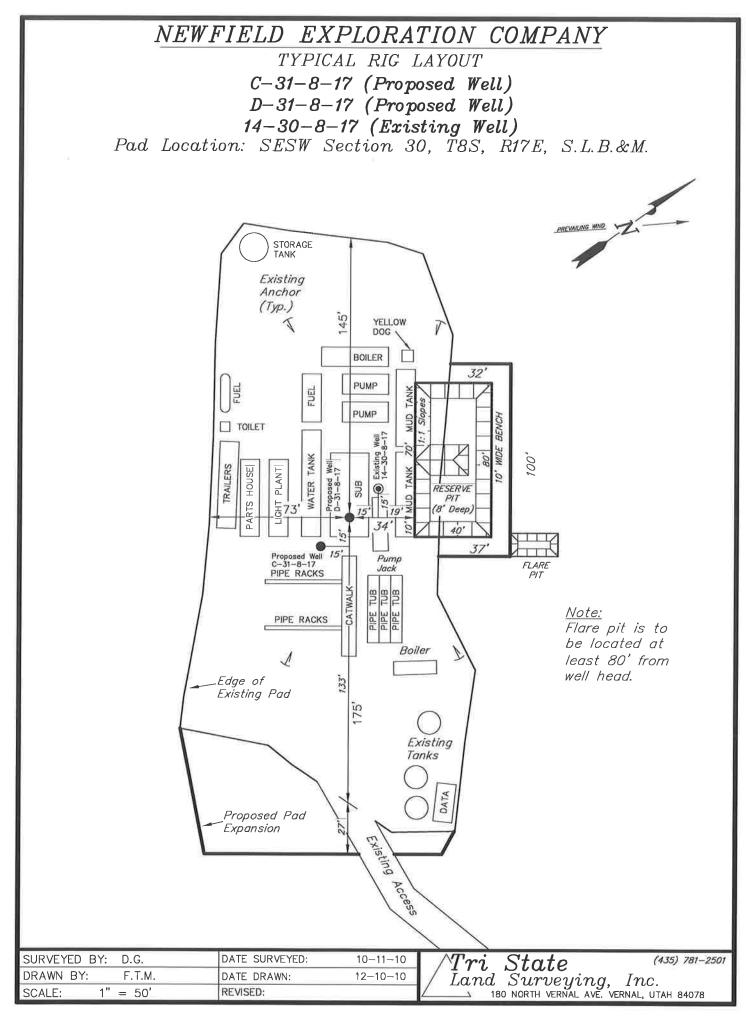


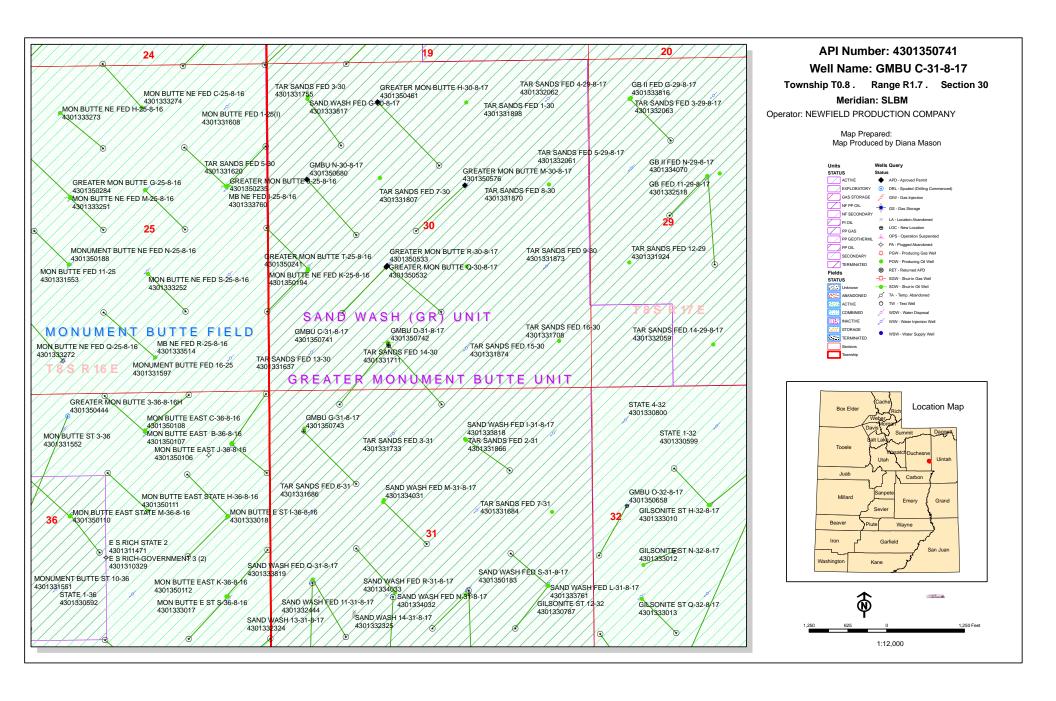
**EXHIBIT C** 













#### VIA ELECTRONIC DELIVERY

May 11, 2011

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

GMBU C-31-8-17

Greater Monument Butte (Green River) Unit

Surface Hole:

T8S-R17E Section 30: SESW (UTU-74869)

711' FSL 1936' FWL

At Target:

T8S-R17E Section 31: NWNE (UTU-74869)

247' FNL 2401' FEL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 5/6/11, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

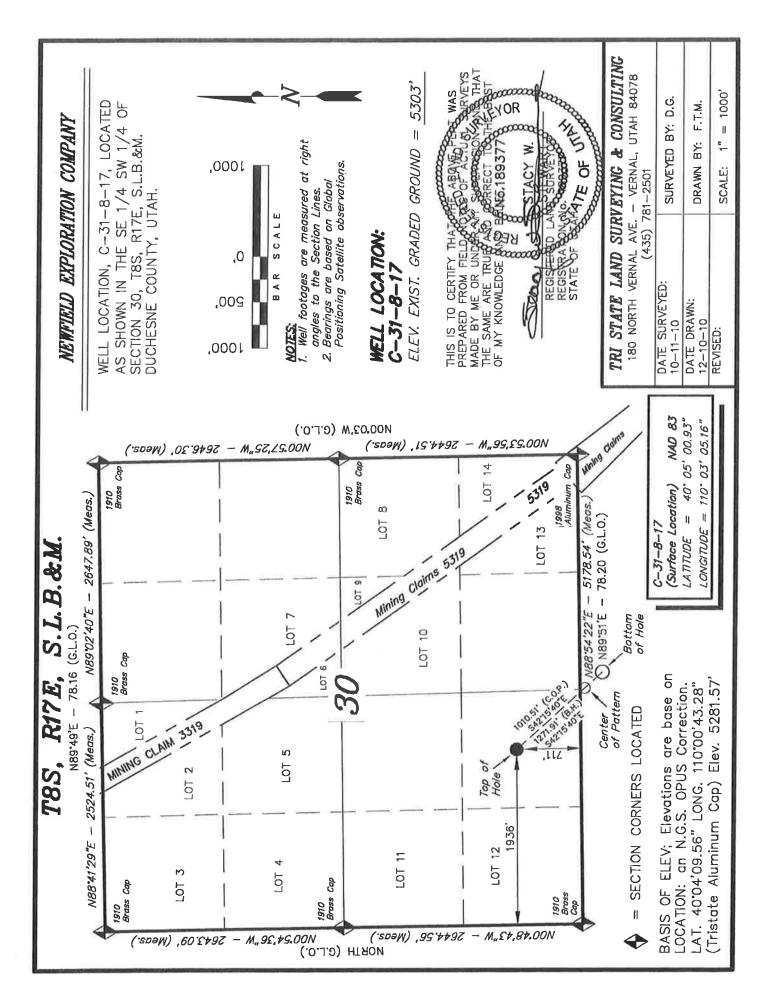
NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at sgillespie@newfield.com. Your consideration in this matter is greatly appreciated.

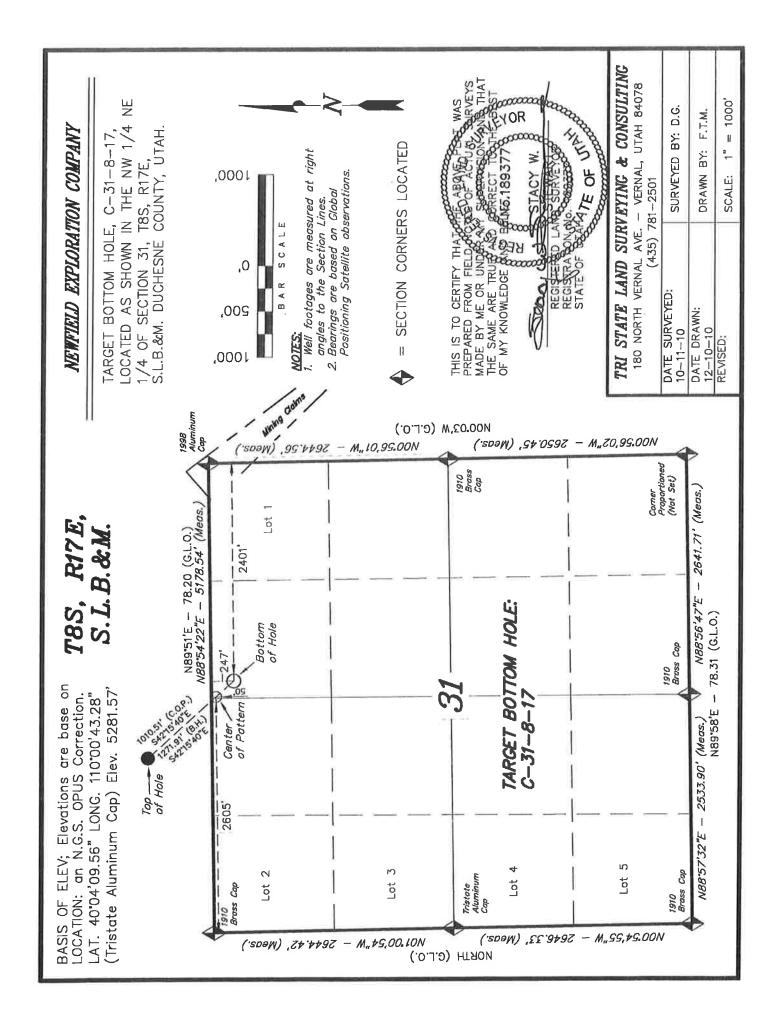
Sincerely,

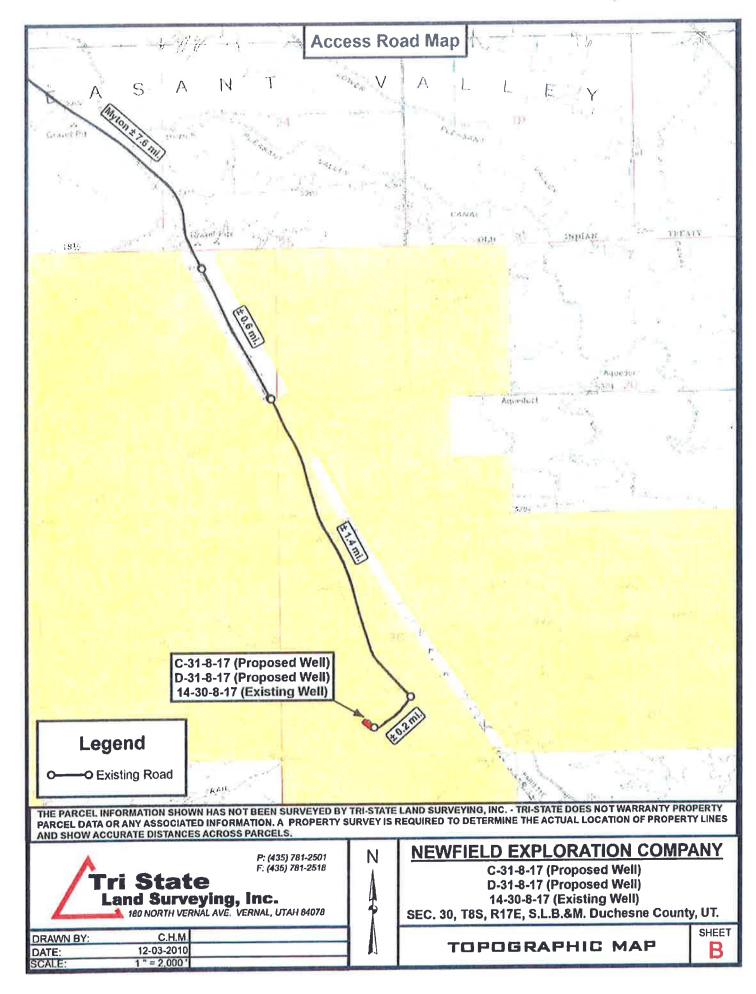
**Newfield Production Company** 

Shane Gillespie Land Associate

Form 3160-3 (August 2007)	august 2007)									
UNITED STATES  DEPARTMENT OF THE  BUREAU OF LAND MAN	INTERIOR			5 Lease Serial No. UTU-74869	July 31, 2010					
APPLICATION FOR PERMIT TO				6. If Indian, Alloted NA	e or Tribe N	laine				
la. Type of work: DRILL REENT	ER			7 If Unit or CA Agreement, Name and No. Greater Monument Butte						
Ib. Type of Well: Oil Well Gas Well Other	<b>√</b> Si	ngle Zone Multi	ple Zone	Lease Name and Well No.     GMBU C-31-8-17						
2. Name of Operator Newfield Production Company				9. API Well No.						
3a. Address Route #3 Box 3630, Myton UT 84052		10. Field and Pool, or Monument Bu		,						
4. Location of Well (Report location clearly and in accordance with a	rty State requiren	nents.*)		11. Sec., T. R. M. or I	Blk.and Surv	rey or Area				
At surface SE/SW 711' FSL 1936' FWL Sec. 30, T8S	R17E (UTU	J-74869)		Sec. 30, T8S F	R17E					
At proposed prod. zone NW/NE 247' FNL 2401 FEL Sec			7. 00							
14. Distance in miles and direction from nearest town or post office* Approximately 9.8 miles southeast of Myton, UT				12 County or Parish Duchesne		I3. State UT				
15 Distance from proposed* location to nearest	16. No. of a	icres in lease	17. Spacin	g Unit dedicated to this	well					
property or lease line, ft. Approx. 2,401' f/lse, NA f/unit (Also to nearest drig. unit line, if any)										
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft  Approx. 920'	19 Proposed Depth 20 BLN 6,545'			W/BIA Bond No. on file WYB000493						
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 5303' GL	22. Approximate date work will start* 23. Estimated duration (7) days from SP					elease				
	24. Attac	chments								
The following, completed in accordance with the requirements of Onsho	re Oil and Gas	Order No.1, must be at	tached to thi	s foπn:						
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	Lands, the	Item 20 above).  5. Operator certific	ation	ns unless covered by ar	·	•				
SOFO must be fried with the appropriate Polest Service Office).		BLM.	specific into	ormation and/or plans a	s may be led	lanca oy me				
25. Signature Manchis Crops		(Printed Typed) ie Crozier			Date 5/4	2/11				
Title Regulatory Specialist										
Approved by (Signature)	Name	(Printed Typed)			Date					
Title	Office									
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	ls legal or equit	able title to those right	s in the subj	ject lease which would e	entitle the ap	plicant to				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	rime for any pe to any matter w	erson knowingly and within its jurisdiction.	illfully to m	ake to any department of	or agency of	fthe United				
(Continued on page 2)				*(Inst	ructions	on page 2)				







# **United States Department of the Interior**

# **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

May 12, 2011

#### Memorandum

API#

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

WELL NAME

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

LOCATION

(Proposed PZ GREEN RIVER)
43-013-50699 GMBU U-7-9-16 Sec 17 T09S R16E 0546 FNL 0671 FWL

BHL Sec 07 T09S R16E 0270 FSL 0178 FEL

43-013-50708 GMBU N-3-9-16 Sec 03 T09S R16E 1963 FSL 0856 FWL

43-013-50708 GMBU N-3-9-16 Sec 03 T09S R16E 1963 FSL 0856 FWL BHL Sec 03 T09S R16E 2259 FNL 1558 FWL

43-013-50709 GMBU T-4-9-16 Sec 03 T09S R16E 1948 FSL 0871 FWL BHL Sec 04 T09S R16E 1102 FSL 0119 FEL

43-013-50710 GMBU W-3-9-16 Sec 10 T09S R16E 0657 FNL 2002 FEL BHL Sec 03 T09S R16E 0307 FSL 2284 FWL

43-013-50721 GMBU D-8-9-16 Sec 05 T09S R16E 0854 FSL 0074 FWL BHL Sec 08 T09S R16E 0312 FNL 1630 FWL

43-013-50722 GMBU Q-5-9-16 Sec 05 T09S R16E 0873 FSL 0063 FWL BHL Sec 05 T09S R16E 1558 FSL 1704 FWL

43-013-50723 GMBU G-7-9-16 Sec 07 T09S R16E 1989 FNL 0685 FWL BHL Sec 07 T09S R16E 0984 FNL 1740 FWL

43-013-50724 GMBU B-7-9-16 Sec 06 T09S R16E 0667 FSL 2065 FEL

BHL Sec 07 T09S R16E 0007 F3H 2005 FEL

API#	WELL NAME	LOCATION	
(Proposed PZ	GREEN RIVER)		
43-013-50725	GMBU H-7-9-16 BHL	 T09S R16E 202 T09S R16E 109	
43-013-50726	GMBU L-7-9-16 BHL	T09S R16E 212 T09S R16E 248	
43-013-50727		 T09S R15E 181 T09S R16E 112	
43-013-50728	GMBU W-6-9-16 BHL	T09S R16E 059 T09S R16E 026	
43-013-50729		 T09S R16E 058 T09S R16E 019	
43-013-50731		 T09S R15E 200 T09S R16E 102	
43-013-50732		T09S R15E 201 T09S R16E 252	
43-013-50733	GMBU S-6-9-16 BHL	T09S R16E 068 T09S R16E 140	
43-013-50738		T09S R16E 083 T09S R16E 032	
43-013-50740		T09S R16E 085 T09S R16E 133	
43-013-50741	GMBU C-31-8-17 BHL	T08S R17E 071 T08S R17E 024	
43-013-50742	GMBU D-31-8-17 BHL	T08S R17E 073 T08S R17E 022	
43-013-50743	GMBU G-31-8-17 BHL	T08S R17E 065 T08S R17E 151	
43-013-50744	GMBU D-2-9-16 BHL	T08S R16E 051 T09S R16E 003	
43-013-50745	GMBU F-8-9-17 BHL	T09S R17E 074 T09S R17E 174	
43-013-50746	GMBU N-7-9-17 BHL	T09S R17E 190 T09S R17E 213	
43-013-50747	GMBU U-6-9-17 BHL		6 FNL 0516 FWL 3 FSL 0210 FEL

Page 3

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50748 GMBU V-31-8-17 Sec 06 T09S R17E 0674 FNL 1958 FEL BHL Sec 31 T08S R17E 0046 FSL 1139 FEL

43-013-50749 GMBU Y-6-9-17 Sec 12 T09S R16E 0194 FNL 0416 FEL BHL Sec 06 T09S R17E 0214 FSL 0292 FWL

43-013-50750 GMBU F-3-9-16 Sec 04 T09S R16E 0714 FNL 0558 FEL BHL Sec 03 T09S R16E 1586 FNL 0331 FWL

This office has no objection to permitting the wells at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard, o=Bureau of Land Management, o=US Date: 2011.05.12 11:18:24-06000

bcc: File - Greater Monument Butte Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:5-12-11

API Well Number: 43013507410000

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 5/6/2011 **API NO. ASSIGNED:** 43013507410000

WELL NAME: GMBU C-31-8-17

**PHONE NUMBER:** 435 646-4825 **OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)

**CONTACT:** Mandie Crozier

PROPOSED LOCATION: SESW 30 080S 170E **Permit Tech Review:** 

> **SURFACE:** 0711 FSL 1936 FWL **Engineering Review:**

> **BOTTOM:** 0247 FNL 2401 FEL Geology Review:

**COUNTY: DUCHESNE** 

**LATITUDE: 40.08364 LONGITUDE:** -110.05066 **UTM SURF EASTINGS: 580939.00 NORTHINGS: 4437262.00** 

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

**LEASE NUMBER: UTU-74869** PROPOSED PRODUCING FORMATION(S): GREEN RIVER SURFACE OWNER: 1 - Federal **COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:**  PLAT R649-2-3. Unit: GMBU (GRRV) Bond: FEDERAL - WYB000493

**Potash** R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit** 

Board Cause No: Cause: 213-11 Water Permit: 437478

**Effective Date:** 11/30/2009 **RDCC Review:** 

Siting: Suspends General Siting **Fee Surface Agreement** 

**Intent to Commingle** ■ R649-3-11. Directional Drill

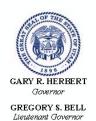
**Commingling Approved** 

**Comments:** Presite Completed

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason 27 - Other - bhill

API Well No: 43013507410000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

# Permit To Drill

\*\*\*\*\*\*

Well Name: GMBU C-31-8-17
API Well Number: 43013507410000
Lease Number: UTU-74869
Surface Owner: FEDERAL

Approval Date: 5/12/2011

#### Issued to:

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause: 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

API Well No: 43013507410000

### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas Form 3160 -3 (August 2007)

# MAY 0 6 2011

UNITED STATES DEPARTMENT OF THE INTERIOR

# BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

- Lease Serial No. UTU-74869
- 6. If Indian, Allotee or Tribe Name

la. Type of work:	7. If Unit or CA Agreement, Name and No. Greater Monument Butte					
lb. Type of Well: Oil Well Gas Well Other	✓s	ngle Zone Multi	ple Zone	8. Lease Name and GMBU C-31-8-		
2. Name of Operator Newfield Production Company				9. API Well No. 43-0/3-	50741	
3a. Address Route #3 Box 3630, Myton UT 84052	l .	). (include area code) 646-3721		10. Field and Pool, or Monument But	• •	
<ol> <li>Location of Well (Report location clearly and in accordance with ar At surface SE/SW 711' FSL 1936' FWL Sec. 30, T8S F</li> </ol>				11. Sec., T. R. M. or I Sec. 30, T8S F	Blk. and Survey or Area	
At proposed prod. zone NW/NE 247' FNL 2401 FEL Sec	. 31, T8S R	17E (UTU-74869)				
14. Distance in miles and direction from nearest town or post office* Approximately 9.8 miles southeast of Myton, UT				12. County or Parish Duchesne	13. State UT	
15. Distance from proposed* location to nearest	16. No. of a	icres in lease	17. Spacin	g Unit dedicated to this	well	
property or lease line, ft. Approx. 2,401' f/lse, NA f/unit (Also to nearest drig. unit line, if any)		77.07		20 Acres		
18. Distance from proposed location* to nearest well, drilling, completed,	19. Propose	•	1	BIA Bond No. on file		
applied for, on this lease, ft.  Approx. 920'	6,5	45'	V	VYB000493		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approxi	mate date work will sta	rt*	23. Estimated duration		
5303' GL	1 3º	e With o	<u>(10</u>	(7) days from SPI	JD to rig release	
	24. Atta					
The following, completed in accordance with the requirements of Onshor	re Oil and Gas	Order No.1, must be a	ttached to thi	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		4. Bond to cover the Item 20 above).	he operation	ns unless covered by an	existing bond on file (s	see
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	Lands, the	5. Operator certifice 6. Such other site BLM.		ormation and/or plans a	s may be required by the	e
25. Signature Charles Charin		(Printed/Typed) ie Crozier			Date 5/6/11	
Title		-				
Regulatory Specialist	Name	(Duint 1/Tomad)			Date Date	
Approved by (Signature)	Name	(Printed/Typed) <b>Jerry</b>	Kenca	zka	DEC 15	201
Title Assistant Field Manager Lands & Mineral Resources	Office			D OFFICE	1	<del></del>
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.		able title to those right FAPPROVAL 1			ntitle the applicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr. States any false, fictitious or fraudulent statements or representations as to	ime for any po o any matter w	erson knowingly and within its jurisdiction.	villfully to m	ake to any department of	or agency of the United	

(Continued on page 2)

RECEIVED

\*(Instructions on page 2)

DEC 27 2011

DIV. OF OIL, GAS & MINING

NOS 1-25-2011 AFMSS# 115X50301A

NOTICE OF APPROVAL



# UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE**

**VERNAL, UT 84078** 

(435) 781-4400

SESWSEC. 30, T8S, R17E SLM



# CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

NEWFIELD PRODUCTION COMPANY Location:

GMBU C-31-8-17

170 South 500 East

API No: 43-013-50741

Lease No: Agreement:

UTU-74869

**GMBU** 

OFFICE NUMBER:

(435) 781-4400

**OFFICE FAX NUMBER: (435) 781-3420** 

## A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

### NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	<ul> <li>Forty-Eight (48) hours prior to construction of location and access roads.</li> </ul>
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	<ul> <li>Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.</li> </ul>

Page 2 of 7 Well: GMBU C-31-8-17

12/5/2011

#### **CONDITIONS OF APPROVAL:**

#### Wildlife

 Construction and drilling is not allowed from May 1<sup>st</sup> – June 15<sup>th</sup> to minimize impacts during Mountain plover nesting.

- Construction and drilling is not allowed from March 1<sup>st</sup> August 31<sup>st</sup> to minimize impacts during burrowing owl nesting.
- Construction and drilling is not allowed from March 1<sup>st</sup> August 31<sup>st</sup> to minimize impacts during ferruginous hawk nesting.
- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or
  qualified biologist should be notified so surveys can be conducted. Depending upon the results of
  the surveys, permission to proceed may or may not be recommended or granted by the BLM
  Authorized Officer.
- The reclamation seed mix will incorporate low growing grasses and forbs; and not crested wheatgrass since this negatively impacts mountain plover habitat.
- Hospital mufflers will be installed on new and existing pump jacks at the host well locations.
- Screening will be placed on stacks and on other openings of heater-treaters or fired vessels to prevent entry by migratory birds.

#### Air Quality

- All internal combustion equipment will be kept in good working order.
- Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer.
- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Low bleed pneumatics will be installed on separator dump valves and other controllers.
- During completion, flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- Well site telemetry will be utilized as feasible for production operations.

#### Reclamation

- Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM.
- Appropriate erosion control and revegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Newfield and, if necessary, modifications will be made to control erosion.

Page 3 of 7 Well: GMBU C-31-8-17 12/5/2011

## Seed Mix (Interim and Final Reclamation)

Common Name	Latin Name	Pure Live Seed (Ibs/acre)	Seed Planting Depth
Squirreltail grass	Elymus elymoides	2.0	1/4 - 1/2"
Needle and thread	Hesperostipa comata	2.0	1/2"
grass			
Siberian Wheatgrass	Agropyron fragile	2.0	1/2"
Shadscale saltbush	Atriplex confertifolia	2.0	1/2"
Four-wing saltbush	Atriplex canescens	2.0	1/2"
Gardner's saltbush	Atriplex gardneri	2.0	1/2"
Blue flax (Lewis flax)	Linum lewisii	1.0	1/8 - 1/4"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.

### **Monitoring and Reporting**

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).

Page 4 of 7 Well: GMBU C-31-8-17 12/5/2011

## DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

Newfield Production Co. shall comply with all aplicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

# DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times.
   Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB

Page 5 of 7 Well: GMBU C-31-8-17 12/5/2011

or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: GMBU C-31-8-17 12/5/2011

#### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - O Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

Page 7 of 7 Well: GMBU C-31-8-17 12/5/2011

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office
  Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in
  order that a representative may witness plugging operations. If a well is suspended or abandoned,
  all pits must be fenced immediately until they are backfilled. The "Subsequent Report of
  Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of
  the well bore, showing location of plugs, amount of cement in each, and amount of casing left in
  hole, and the current status of the surface restoration.

FORM 3160-5
(August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0137 Expires: July 31,2010

BUREAU OF LAND MANAGEMENT					pires. July 31,2010	
SUNDRY	5. Lease Serial No					
Do not use the abandoned we	USA UTU-74869 6. If Indian, Allottee or Tribe Name.					
SUBMIT IN	7. If Unit or CA/Agreement, Name and/or GMBU					
1. Type of Well  Oil Well Gas Well  2. Name of Operator	8. Well Name and No. GMBU C-31-8-17					
NEWFIELD PRODUCTION CO	OMPANY					
3a. Address Route 3 Box 3630		3b. Phone (include are	code)	9. API Well No. 4301350741		
Myton, UT 84052		435.646.3721		10. Field and Pool, or Exploratory Area		
4. Location of Well (Footage, S	Sec., T., R., M., or Survey Descrip	tion)		GREATER MB UNIT		
				11. County or Pari	sh, State	
Section 31 T8S R17E				DUCHESNE, UT		
12. CHECK	APPROPRIATE BOX(ES	S) TO INIDICATE NA	ATURE OF N	OTICE, OR OT	HER DATA	
TYPE OF SUBMISSION TYPE OF ACTION						
Notice of Intent  Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Productio Reclamat Recomple		■ Water Shut-Off ■ Well Integrity ■ Other	
Final Abandonment	Plug & Abandon Plug Back	Temporar Water Dis	ily Abandon sposal	Spud Notice		

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 1/25/2012 MIRU Ross #26. Spud well @9:00 AM. Drill 335' of 12 1/4" hole with air mist. TIH W/ 8 Jt's 8 5/8" J-55 24# csgn. Set @ 329.11. On 1/30/2012 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 5 barrels cement to pit. WOC.

RECEIVED FEB 0 9 2012

DIV. OF OIL, GAS & MINING

Title				
Date 02/01/2012				
ERAL OR STATE OFFIC	CE USE			
Title	Date			
Office				
	02/01/2012  PERAL OR STATE OFFIC  Title	02/01/2012  PERAL OR STATE OFFICE USE  Title  Date		

(Instructions on page 2)

# Casing / Liner Detail

Well	GMBU C-31-8-17
Prospect	Monument Butte
Foreman	
Run Date:	1/25/2012
String Type	Surface, 8.625", 24#, J-55, STC (Generic)

# - Detail From Top To Bottom -

Depth	Length	JTS	Description	OD	ID
				<u> </u>	L
340.01	1.42		WellHead		
341.43	-2.00		Cutoff		
10.00	287.91	7	8 5/8 Surface Casing	8.625	
297.91	41.20	1	Shoe JT	8.625	
339.11	0.90	1	Guide Shoe		
340.01			КВ		

Cement C	ompany: E	3J	CO. Service and designation on the Company	THE PERSON NAMED IN THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF THE PERSON NAMED IN COLUMN THROUGH A STATE OF						
Slurry	# of Sacks	Weight (ppg	Yield	Volume (ft³)	Description - Slurry Class and Additives					
1	160	15.8	1.17	187.2	Class "G"+2%CaCl Mixed@ 15.8ppg W/1.17 yield					
Stab-In-Jo	h2		No		Cement To Surface?	Yes				
BHT:	U:		0		Est. Top of Cement:					
	ulation Pressu	ıre:			Plugs Bumped?	Yes				
nitial Circu	ulation Rate:				Pressure Plugs Bumped: 105					
Final Circu	lation Pressu	re:			Floats Holding?					
Final Circu	lation Rate:		•		Casing Stuck On / Off Bottom?	No				
Displacem	ent Fluid:		Water		Casing Reciprocated?	No				
Displacement Rate:				Casing Rotated?	No					
Displacement Volume:		18.3		CIP:	1:58					
Mud Returns: Full			Casing Wt Prior To Cement:							
Centralize	r Type And Pl	acement:			Casing Weight Set On Slips:					
Middle of f	irst, top of se	cond and thire	for a tota	l of three.						

Cement Detail



OPERATOR: NEWFIELD PRODUCTION COMPANY

ADDRESS: RT. 3 BOX 3630

MYTON, UT 84052

OPERATOR ACCT. NO.

N2695

CODE	CURRENT ENTITY NO	NEW ENTITY NO.	API NUMBER	WELL NAME	aa	WE	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE
В	99999	17400	4301350741	GMBU C-31-8-17	SESW	30					DATE
	COMMENTS:	17400	7301330771	GMD0 C-31-6-17	SESW	30	65	17E	DUCHESNE	1/25/2012	2115112
INVELL IC	JOMINIEN 13:										
	GRRV		: 531 nu							, <del></del>	
ACTION	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	90	SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
					1				COUNTY	DATE	DATE
В	99999	17400	4301350742	GMBU D-31-8-17	SESW	30	88	17E	DUCHESNE	1/26/2012	2115112
											,
	00.7	S	0010	,							
ACTION	QRV CURRENT	BHL:	S21 hw	WELL NAME	Т		LL LOCA	701	<del></del>		
В	CURRENT ENTITY NO.	NEW ENTITY NO	Armonden	WELL WAVE	- 00		IP IP	RG	COUNTY	SPUD DATE	EFFECTIVE
В	00000	47400	4004754000	OMBILLI 05 0 47	<b>A</b>	l					OHEHO
<u> </u>	99999	17400	4304751629	GMBU H-35-8-17	SWNW	35	85	17E	UINTAH	1/27/2012	2115/12
1 6	RRV	BHL: S	sune								<del></del>
ACTION CODE		NEW ENTITY NO	API NUMBER	WELL NAME			LL LOCA			SPUD	EFFECTIVE
CODE	ENTIT NO.	ENTITY NO			QC	sc	TP	RG	COUNTY	DATE	DATE
В	99999	17400	4304751630	GMBU I-35-8-17	SWNE	35	88	17E	UINTAH	1/30/2012	2115112
C	RRV	BHL:	S1.50 0							•	
ACTION		NEW	API NUMBER	WELL NAME	1	WE	LL LOCA	rion		SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO			00	sc	TP	RG	COUNTY	DATE	DATE
_							İ				
В	99999	17400	4301350680	GMBU N-30-8-17	Swho	<b>₹30</b>	85	17E	DUCHESNE	1/27/2012	2115/12
G	RRV	BHL: r	105111								
ACTION		NEW	API NUMBER	WELL NAME		WE	LL LOCA	TION		SPUD	EFFECTIVE
	CURRENT				QQ	sc	TP	RG	COUNTY		)
CODE	CURRENT ENTITY NO.	ENTITY NO				1	15	RG	COUNTY	DATE	DATE
CODE		ENTITY NO			100		I P	RG	COUNTY	DATE	DATE
CODE		ENTITY NO						RG	COUNTY	DATE	DATE
CODE		ENTITY NO						RG	COUNTY	DATE	DATE
CODE		ENTITY NO						RG	COUNTY	DATE	DAIE

A - 1 new entity for new well (single well only)

B - / well to existing entity (group or unit well)

C - from one existing entity to another existing entity

NOTE: Use COMMENT section to explain why each Action Code was selected

D - well from one existing entity to a new entity

E - ther (explain in comments section)

**RECEIVED** 

FEB 0 1 2012

**Production Clerk** 

02/01/12

Jentri Park

DIV. OF OIL, GAS & MINING

# BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# 26 Submitted By Mike Braithwaite Phone Number 435-401-8392 Well Name/Number C-31-8-17 Qtr/Qtr SE/SW Section 30 Township 8S Range 17E Lease Serial Number UTU-74869 API Number 43-013050741
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time <u>1/25/2012</u> <u>4:00</u> AM PM
Casing — Please report time casing run starts, not cementing times.  Surface Casing Intermediate Casing Production Casing Liner Other
Date/Time <u>1/26/2012</u> <u>9:00</u> AM ⊠ PM □
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other  Date/Time  AM PM
Date/Time AM PM Remarks

Sundry Number: 29183 API Well Number: 43013507410000

	FORM 9		
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-74869
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GMBU C-31-8-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43013507410000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,		ONE NUMBER: kt	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0711 FSL 1936 FWL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SESW Section: 3	HP, RANGE, MERIDIAN: Township: 08.0S Range: 17.0E Meridian:	S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:		CHANGE TUBING	CHANGE WELL NAME
SUBSEQUENT REPORT		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
Date of Work Completion:		FRACTURE TREAT	☐ NEW CONSTRUCTION
		PLUG AND ABANDON	☐ PLUG BACK
SPUD REPORT Date of Spud:		RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
		SIDETRACK TO REPAIR WELL	L TEMPORARY ABANDON
✓ DRILLING REPORT	L TUBING REPAIR	VENT OR FLARE	☐ WATER DISPOSAL
Report Date: 3/10/2012		SI TA STATUS EXTENSION	APD EXTENSION
		OTHER	OTHER:
The above well w	completed operations. Clearly show all person placed on production on 03 aced on pump on 03/10/2012	3/09/2012 at 16:00	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 24, 2012
NAME (PLEASE PRINT) Jennifer Peatross	<b>PHONE NUMBER</b> 435 646-4885	TITLE Production Technician	
SIGNATURE N/A		<b>DATE</b> 8/23/2012	

Form 3160-4 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

5. Lease Serial No.

# WELL COMPLETION OR RECOMPLETION REPORT AND LOG

												UTU	-74869		
la. Type of W	/ell	<b>☑</b> oil w		Gas Well		Other	□ Dier	Dacur				6. If NA	Indian, A	Allottee or Tri	be Name
												7. U	nit or CA		Name and No.
2. Name of C	perator EXPLOR	ATION C	ÓMPAN	IY	· · · · · · · · · · · · · · · · · · ·							8. Le		ne and Well N	lo.
3. Address 3a. Phone No. (include area code)												9. A	FI Well 1	No.	
					lance with Federa			-0121				10. F	ield and	Pool or Expl	oratory
At surface	711' ESI	ደ 1036'	EWI (SE	E/SW) SEC	30, T8S, R17E	(UTU-7486	69)					11 5	Sec T	IT BUTTE R., M., on Blo	ock and
			·	·								S	Survey or	Area SEC. 3	0, T8S, R17E
At top prod. interval reported below 109' FSL & 2491' FWL (SE/SW) SEC. 30, T8S, R17E (UTU-74869)													12. County or Parish 13. State		
At total depth 217' FNL & 2199 FEL (NW/NE) SEC. 31, T8S, R17E (UTU-74869) BHL by HSM													CHESN		UT
14. Date Spudded 15. Date T.D. Reached 16. Date Completed 03/10/2012 17. Elevations (DF, RKB, 01/25/2012 02/09/2012 D & A  Ready to Prod. 5303' GL 5313' KB												, RT, GL)*			
18. Total De		6521' 6377'		19. Pl		4D 6499' VD 6235	<u></u> Б		20. De	pth Bri	dge Plug		MD TVD		
	ectric & Othe	er Mechani		un (Submit co	py of each)				22. W	as well as DST		ZN		Yes (Submit a Yes (Submit i	
					EUTRON,GR,C	ALIPER, C	MT BO	ND 			al Survey		6 <b>Z</b>	Yes (Submit	copy)
23. Casing a	and Liner Re Size/Gra		ort all str (#/ft.)	rings set in we Top (MD)	Bottom (MD)	Stage Co			of Sks.	1	Slurry		Ceme	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-				340'	Dep	oth		of Cen	Cement (BBL)			<u> </u>		
7-7/8"	5-1/2" J-			····	6503'			230 P	RIMLI	RIMLITE			30'		
								475 5	0/50 P	oz					
	<u> </u>														
24. Tubing						1 5-45-	. 0.50	Darles	Dooth (	NOV I	Siz		Dont	h Set (MD)	Packer Depth (MD)
2-7/8"	Depth S EOT@	et (MD) 6143'	Packer I	Depth (MD) 144'	Size	Depth Se	T (MLD)	Раскег	Depth (	MD)	312	e	Бери	i set (IVID)	racket Depth (NE)
25. Producin	ng Intervals						foration I		-		Size	l Mo I	Holes		Perf. Status
A) Green f	Formation River	1	450	Top 8'	Bottom 6094'	5965-60	tervai	0.36"		18	rivies		Ten. Status		
B)						4508-57	35'			0.34"		69			
C)															
D) 27. Acid, Fr	ontura Tres	tment Cer	ment Saue	eze etc						L		<u> </u>			
	Depth Interv							Amount		******					
4508-6094			Frac	c w/ 199378	# 20/40 white sa	and in 1664	bbls Li	ghtning	17 flc	iid, in	5 stage:	3.			
28. Product		l A Hours	Test	Oil	Gas	Water	Oil Gra	vity	Ga	S		luction N			
Produced		Tested	Producti		MCF	BBL	Corr. A	PI	Gr	avity	2-1	/2" x 1-	·3/4" x 2	20' x 21' x 2	4' RHAC Pump
	3/20/12	24		37		52 Water	Gas/Oil	1	137	ell Stati	110				
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL		water BBL	Ratio	ı			ICING				
	SI			<b>-</b>											
28a. Produc			Trant	Oil	Gas	Water	Oil Gra	wity	JG:	ıs	Pro	duction l	Method		14.5
Date First Produced	Test Date	Hours Tested	Test Producti			BBL	Corr. A			avity	"				
				<u> </u>	Coo	Water	Gas/Oi	<u> </u>	137	ell Stat	115				
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL		Water BBL	Ratio	1	ľ	on stat	us		ļ	RECE	IVED
	SI		-	•					Ì					AUC 0	- nas
*(See instr	uctions and	spaces for	additiona	l data on page	: 2)									AUG ?	ZUIZ

28b. Prod Date First	uction - Inte Test Date	rval C Hours	Test	Oil	Gas	Water	Oil Gravity	Gas	Production Method	<u> </u>
Produced	Test Date	Tested	Production	BBL	MCF	BBL	Corr. API	Gravity	riodaction Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
	uction - Inte		L	To:	Jo.		lon a	la	<b>5</b> 1 2 2 1 2 1	
Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
29. Dispo	sition of Ga	s (Solid, us	ed for fuel, ve	nted, etc.)						
	USED FOR I								· · · · · · · · · · · · · · · · · · ·	
30. Sumr	nary of Porc	ous Zones	(Include Aqui	fers):				31. Format	ion (Log) Markers	
	ing depth int					ntervals and all ng and shut-in p	l drill-stem tests, pressures and	GEOLOG	BICAL MARKERS	
		T .	1	T						Тор
Fon	mation	Тор	Bottom		Desc	riptions, Conte	ents, etc.		Name	Meas. Depth
GREEN RI	VER	4508'	6094'		***************************************		. ,	GARDEN GI GARDEN GI	JLCH MARKER JLCH 1	4018' 4220'
				i				GARDEN GI POINT 3 MR		4340' 4617'
								X MRKR Y MRKR		4851' 4891'
								DOUGLAS ( BI-CARBON	ATE	5018' 5263'
								B LIMESTOI CASTLE PE	AK	5385' 5909'
								BASAL CAR WASATCH	BONATE	6336' 6463'
20 111							<del> </del>			
		•	plugging pro	•	/09/2012 an	d placed on a	nump on 03/10/	2012. Test dat	a was taken ten (10) days f	ollowing, on 03/20/2012.
		,					,			ŭ
33 Indic	ate which its	oms have h	een attached l	w nlacino	a check in the	appropriate bo	oves.			
							_	Danad	☑ Directional Survey	
		_	(1 full set req	,		Geologic Report Core Analysis	rt DST	*	Directional Survey	
34. I here	by certify th	nat the fore	going and atta	ached info	mation is con	plete and corre	ect as determined f	from all available	records (see attached instruction	s)*
			nnifer Peat					tion Technician		
	Signature (		WV18	2			Date 07/03/2	012		
Title 18 U	J.S.C. Section	on 1001 and	d Title 43 U.S	.C. Section	n 1212, make	it a crime for a atter within its	ny person knowing jurisdiction.	gly and willfully to	o make to any department or age	ncy of the United States any

(Continued on page 3) (Form 3160-4, page 2)



# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 30 T8S, R17E C-31-8-17

Wellbore #1

Design: Actual

# **Standard Survey Report**

18 February, 2012





Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site: Well: SECTION 30 T8S, R17E

Wellbore: Design:

C-31-8-17 Wellbore #1 Actual

Local Co-ordinate Reference:

Well C-31-8-17

C-31-8-17 @ 5313.0ft (NDSI SS #1)

C-31-8-17 @ 5313.0ft (NDSI SS #1)

TVD Reference: MD Reference: North Reference:

True

Survey Calculation Method:

Database:

EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983

Utah Central Zone

System Datum:

Mean Sea Level

Minimum Curvature

Site

SECTION 30 T8S, R17E

Site Position:

Northing: Easting:

7,203,800.00 ft

Latitude:

40° 5' 14.755 N 110° 3' 47.352 W

From:

Lat/Long

2,042,400.00 ft

Longitude:

Position Uncertainty:

0.0 ft

Slot Radius:

Grid Convergence:

0.92 °

Well

C-31-8-17, SHL LAT: 40 05 00.93 LONG: -110 03 05.16

Well Position

+N/-S

0.0 ft 0.0 ft Northing: Easting:

7,202,454.19 ft 2,045,701.24 ft

11.38

Latitude: Longitude: 40° 5' 0.930 N

**Position Uncertainty** 

+E/-W

0.0 ft

Wellhead Elevation:

12/9/2010

5,313.0 ft

**Ground Level:** 

110° 3′ 5.160 W

52,346

5,303.0 ft

Wellbore

Wellbore #1

Magnetics

Model Name

IGRF2010

Sample Date

Declination (°)

Dip Angle

Field Strength

(nT)

Design

Actual

Audit Notes:

1.0

Phase:

**ACTUAL** 

Tie On Depth:

0,0

65.84

Version: **Vertical Section:** 

Depth From (TVD) (ft) 0.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°)

137.74

Survey Program

(ft)

Date 2/18/2012

From

346.0

To (ft)

Survey (Wellbore) 6,521.0 Survey #1 (Wellbore #1) **Tool Name** 

MWD

Description MWD - Standard

ey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
346.0	0.10	332.40	346.0	0.3	-0.1	-0.3	0.03	0.03	0.00
376.0	0.20	23.00	376.0	0.3	~0.1	-0.3	0.52	0.33	168.67
407.0	0.20	340.40	407.0	0.4	-0.1	-0.4	0.47	0.00	-137.42
437.0	0.20	30.40	437.0	0.5	-0.1	-0.5	0.56	0.00	166.67
468.0	0.30	12.00	468.0	0.7	-0.1	-0.5	0.41	0.32	-59.35
	0.20	27.20	499.0	0.8	0.0	-0.6	0.38	-0.32	49.03
499.0	0.20	337.40	529.0	0.9	0.0	-0.6	0.52	-0.33	-166.00
529.0	0.10	157.80	560.0	0.7	0.0	-0.5	2.26	1.61	-579.36
560.0 621.0	0.90	149.70	621.0	0.0	0.4	0.2	0.52	0.49	-13.28
	1.40	158.70	652.0	-0.5	0.7	8.0	1.71	1.61	29.03
652.0	1.80	158.90	682.0	-1.3	1.0	1.6	1.33	1.33	0.67
682.0 713.0	2.20	148.40	713.0	-2.3	1.4	2.7	1.74	1.29	-33.87



Survey Report



Company: Project:

NEWFIELD EXPLORATION USGS Myton SW (UT)

Site: Well: SECTION 30 T8S, R17E C-31-8-17

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

Well C-31-8-17

C-31-8-17 @ 5313.0ft (NDSI SS #1) TVD Reference: C-31-8-17 @ 5313.0ft (NDSI SS #1) MD Reference:

North Reference:

Minimum Curvature

Survey Calculation Method: Database:

EDM 2003.21 Single User Db

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
743.0	2.90	147.60	742.9	-3.4	2.2	4.0	2.34	2.33	-2.67
774.0	3.70	144.10	773.9	-4.9	3.2	5.7	2.66	2.58	-11.29
					4.4	7.9	2.62	2.58	6.13
805.0	4.50	146.00	804.8	-6.7	4.4	10.4	1.19	1.00	-8.00
835.0	4.80	143.60	834.7	-8.7	5.8		1.19	1.36	-0.45
879.0	5.40	143.40	878.5	~11.8	8.2	14.2 18.6	1.14	1.14	-0.91
923.0	5.90	143.00	922.3	-15,3	10.8	23.4	2.05	2.05	-0.68
967.0	6.80	142.70	966.0	-19.2	13.7				
1,011.0	7.30	140.90	1,009.7	-23.4	17.0	28.8	1.24	1.14	-4.09
1,055.0	7.90	140.40	1,053.3	-27.9	20.7	34.6	1.37	1.36	-1.14
1,099.0	8.50	136.50	1,096.9	-32.6	24.9	40.9	1.86	1.36	-8.86
1,143.0	8.80	136.10	1,140.4	-37.4	29.5	47.5	0.70	0.68	-0.91
1,187.0	9.40	133.60	1,183.8	-42.3	34.4	54.4	1.63	1.36	-5.68
	10.70	133.70	1,227.1	-47.6	40.0	62.1	2.95	2.95	0.23
1,231.0	11.50	133.30	1,270.3	-53.4	46.1	70.5	1.83	1.82	-0.91
1,275.0 1,319.0	12.00	133.00	1,313.4	-59.6	52.6	79.5	1.14	1.14	-0.68
1,363.0	12.30	132.90	1,356.4	-65.9	59.4	88.7	0.68	0.68	-0.23
1,407.0	12.70	134.20	1,399.4	-72.4	66.3	98.2	1.11	0.91	2.95
•					73.3	107.9	0.48	0.45	-0.68
1,451.0	12.90	133.90	1,442.3	-79.2	73.3 80.5	117.9	0.48	0.91	1.14
1,495.0	13.30	134.40	1,485.1	-86.2	87.8	128.2	1.17	1.14	1.14
1,539.0	13.80	134.90	1,527.9	-93.4	95.2	138.8	1.03	0.68	3.18
1,583.0	14.10	136.30	1,570.6	-101.0 -108.7	102.7	149.5	0.45	0.23	-1.59
1,627.0	14.20	135.60	1,613.3	-100.7					
1,671.0	14.20	136.10	1,655.9	-116.5	110.2	160.3	0.28	0,00	1.14
1,715.0	14.00	135.20	1,698.6	-124.1	117.7	171.0	0.67	-0.45	-2.05
1,759.0	14.10	133.40	1,741.3	-131.6	125.4	181.7	1.02	0.23	-4.09
1,803.0	14.00	132.90	1,784.0	-138.9	133.2	192.3	0.36	-0.23	-1.14
1,847.0	13.70	132.60	1,826.7	-146.0	140.9	202.8	0.70	-0.68	-0.68
1,891.0	13.20	131.70	1,869.5	-152.9	148.5	213.0	1.23	-1.14	-2.05
1,935.0	12.90	130.00	1,912.3	-159.4	156.0	222.9	1.11	-0.68	-3.86
1,979.0	12.60	129.00	1,955.3	-165.6	163.5	232.5	0.85	-0.68	-2.27
2,023.0	12.40	129.00	1,998.2	-171.6	170.9	241.9	0.45	-0.45	0.00
2,067.0	12.10	129.40	2,041.2	-177.5	178.1	251.1	0.71	-0.68	0.91
				-183.2	185.2	260.1	1.05	-0.91	-2.50
2,111.0	11.70	128.30	2,084.3		192.2	268.9	0.65	0.00	-3.18
2,155.0	11.70	126,90	2,127.4	-188.6		277.8	0.88	0.68	2.73
2,199.0	12.00	128.10	2,170.4	-194.1 -199.8	199.4 206.7	277.8	0.70	0.68	0.68
2,243.0	12.30	128.40	2,213.4	-199.8	214.1	296.2	0.46	0.45	0.23
2,287.0	12.50	128.50	2,256.4						
2,331.0	12.70	128.10	2,299.3	-211.7	221.6	305.7	0.50	0.45	-0.91
2,375.0	12.80	128.20	2,342.3	-217.7	229.3	315.3	0.23	0.23	0.23 -0.45
2,419.0	13.10	128.00	2,385.1	-223.7	237.0		0.69	0.68	1.36
2,463.0	13.10	128.60	2,428.0	-229.9	244.8		0.31	0.00	4.55
2,507.0	13.30	130.60	2,470.8	-236.3	252.6	344.8	1.13	0.45	
2,551.0	13.30	133,50	2,513.7	-243.1	260.1	354.8	1.52	0.00	6.59
	13.90	134.70	2,556.4	-250.3	267.5		1.51	1.36	2.73
2,595.0 2,639.0	14.30	139.10	2,599.1	-258.1	274.8		2.60	0.91	10.00
2,683.0		140.60	2,641.7	-266.5	281.9		0.87	0.23	3.41
2,727.0		139.50	2,684.3	-274.8	288.9		0,66	-0.23	-2.50
					296.0		0.66	0.23	-2.50
2,771.0			2,727.0	-283.1	303.2		0.53	-0.45	1.14
2,815.0			2,769.6	-291.2	310.2		0.92	-0.91	-0.68
2,859.0			2,812.3	-299,2 -306.6	316.2		3.24	-3.18	-2.73
2,903.0			2,855.2	-313.5	323.4		1.19	-0.89	-3.78
2,948.0	12.00	135.70	2,899.1						
2,992.0	12.10	134.00	2,942.2	-320.0	330.0		0.84	0.23	-3.86 5.45
						4003			

-326.8

2,985.1

13.10

3,036.0

136.40

336.7

468.3

2.56

5.45



Survey Report

MD Reference:



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site: Well: SECTION 30 T8S, R17E C-31-8-17

Wellbore: Design: Wellbore #1 Actual Local Co-ordinate Reference:

TVD Reference:

Well C-31-8-17

C-31-8-17 @ 5313.0ft (NDSI SS #1)

C-31-8-17 @ 5313.0ft (NDSI SS #1)

North Reference:

Minimum Curvature

True

Survey Calculation Method: Database:

EDM 2003.21 Single User Db

: A	ctual			Database:		EDIN 2003.21 Single User UD					
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)		
			3,027.9	-334.6	343.6	478.7	3.44	2.50	10,00		
3,080.0		140.80	3,070.4	-343.4	350.6	489.9	2.81	2.73	2.73		
3,124.0		142.00			357.8	501.8	1.84	1.59	3.41		
3,168.0	16.10	143.50	3,112.8	-352.9	331.0	301.0					
3,212.0	16.20	143.00	3,155.0	-362.7	365.1	514.0	0.39	0.23	-1.14		
3,256.0		142.70	3,197.3	-372.6	372.6	526.3	0.49	0.45	-0.68		
3,300.0		144.40	3,239.4	-382.7	380.1	538.9	1.76	1.36	3.86		
3,344.0		144.90	3,281.5	-393.3	387.5	551.7	0.40	0.23	1.14		
3,388,0		143.70	3,323.7	-403.3	394.8	564.0	3.49	-3.41	-2.73		
3,432.0	14.70	143.70	3,366.2	-412.6	401.6	575.4	2.05	-2.05	0.00		
3,476.0		144.10	3,408.7	-421.8	408.3	586.7	1.16	1.14	0.91		
3,520.0		143.80	3,451.1	-431.1	415.1	598.2	0.49	0.45	-0.68		
3,564.0		141.70	3,493.5	-440.4	422.2	609.9	1.27	0.00	-4.77		
3,564.0		140.80	3,536.0	-449.5	429.4	621.4	0.87	-0.68	-2.05		
				-458.3	436.7	632.8	0.33	-0.23	-0.91		
3,652.0		140.40	3,578.5		444.0	644.3	0.29	0.23	-0.68		
3,696.0		140.10	3,621.0	-467.1 -475.7	451.3	655.6	0.97	-0.91	-1.36		
3,740.0		139.50	3,663.5 3,706.1	-475.7 -484.1	451.3	666.5	1.37	-1.36	0.45		
3,784.0		139.70 139.60	3,748.8	-492.2	465.3	677.2	0.23	~0.23	-0.23		
3,828.0							0.81	-0.68	-1.82		
3,872.0		138.80	3,791.5	-500.2	472.2	687.7	1.53	-1.36	-2.95		
3,916.0		137.50	3,834.3	-507.8	479.0	697.9 707.7	1.19	-0.91	-3.41		
3,960.0		136.00	3,877.2	-514.9	485.7	717.4	0.80	0.00	3.64		
4,004.0		137.60	3,920.1	-522.0	492.3 498.9	717.4	0.00	-0.67	1.56		
4,049.0	12.40	138.30	3,964.0	-529.2							
4,093.0	11.80	139.50	4,007.1	-536.2	504.9	736.4	1.48	-1.36	2.73		
4,137.0	12.20	142.70	4,050.1	-543.3	510.7	745.5	1.76	0.91	7.27 3.18		
4,181.		144.10	4,093.1	-550.8	516.2	754.8	0.67	0.00	3.16 4,55		
4,225.		146.10	4,136.1	-558.4	521.5	764.0	0.98	-0.23	1.36		
4,269.	0 12.30	146.70	4,179.1	-566.1	526.6	773.1	0.54	0.45			
4,313.	0 12.10	144.70	4,222.1	-573.8	531.9	782.3	1.06	-0.45	-4.55		
4,356.	0 12.10	142.90	4,264.2	-5 <b>8</b> 1. <b>1</b>	537.2	791.3	0.88	0.00	-4.19		
4,400.	0 11.80	140.40	4,307.2	-588.2	542.9	800.4	1.36	-0.68	-5.68		
4,444.	0 12.00	140.00	4,350.3	-595.2	548.7	809.5	0.49	0.45	-0.91		
4,488.	0 12.00	136.40	4,393.3	-602.0 <-	> 554.8	818.6	1.70	0.00	-8.18		
4,532.	0 11.70	135.40	4,436.4	-608.5	561.0	827.6	0.83	-0.68	-2.27		
4,576.		136.40	4,479.5	-614.8	567.2	836.4	1.02	-0.91	2.27		
4,620.		138.80	4,522.7	-621.0	572.8	844.8	1.54	-1.14	5.45		
4,664.		139.00	4,565.9	-627.3	578.4	853.2	0.91	0.91	0.45		
4,708.		140.00	4,609.0	-634.0	584.0	862.0	1.22	1.14	2.27		
4,752.	0 11.70	139.70	4,652.1	-640.8	589.8	870.9	0.14	0.00	-0.68		
4,796.		140.00	4,695.2	-647.6	595.6	879.8	0.27	0.23	0.68		
4,730.		141.90	4,738.3	-654.6	601.2	888.7	0.99	-0.45	4.32		
4,884.		141.80	4,781.3	-661.7	606.8	897.8	1.14	1.14	-0.23		
4,928.		140.30	4,824.3	-668.9	612.6	907.0	0.85	0.45	-3.41		
			4,867.3	~675.9	618.7	916.3	1.15	-0.45	-5,00		
4,972			4,910.4	-682.8	624.8		0.23	-0.23	0.00		
5,016.			4,954.4	-682.8	631.3		1.16	0.44	-5.11		
5,061			4,997.3	-696.4	637.8		0.72	0.68	1.14		
5,105. 5,149.			5,040.2	-703.5	644.5		1.39	1.36	1.14		
							1.15	-0.91	3.18		
5,193			5,083.1	-710.8 717.9	651.1 657.4		1.17	-1.14	1.36		
5,237			5,126.1	-717.9 -724.8	663.5		0.33	-0.23	-1.14		
5,281			5,169.1	-724.8	669.7		0.54	0.45	1.36		
5,325			5,212.1	-731.8 -738.8	675.9		0.29	0.00	-1.36		
5,369	.0 12.30	138.30	5,255.1								
5,413	.0 12.10	138.20	5,298.1	-745.7	682.1	1,010.6	0.46	-0.45	-0.23		



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT) SECTION 30 T8S, R17E

Site: Well:

C-31-8-17

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well C-31-8-17

C-31-8-17 @ 5313.0ft (NDSI SS #1) C-31-8-17 @ 5313.0ft (NDSI SS #1)

True

Minimum Curvature

EDM 2003.21 Single User Db

Measured			Vertical		. 67.141	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
5,414.8	12.10	138.23	5,299.9	-746.0	682.3	1,011.0	0.40	0.23	1.60
C-31-8-17							0.40	0.23	1,59
5,457.0	12.20	138.90	5,341.1	-752.7	688.2	1,019.9	0.40	2.05	1.14
5,501.0	13.10	139.40	5,384.1	-760.0	694.5	1,029.5	2.06		-1.59
5,545.0	13.70	138.70	5,426.9	-767.7	701.2	1,039.7	1.41	1.36	-1.59
5,589.0	13.70	137.90	5,469.6	-775.5	708.1	1,050.1	0.43	0.00	-1.82
5,633.0	14.30	139.30	5,512.3	-783.4	715.2	1,060.8	1.57	1.36	3.18
5,633.0	15.30	140.00	5,554.8	-792.0	722.4	1,072.0	2.31	2.27	1.59
5,721.0	16.20	138.50	5,597.2	-801.1	730.2	1,083.9	2.24	2.05	-3.41
5,765.0	16.20	135.90	5,639.4	-810.1	738.6	1,096.2	1.65	0.00	-5.91
·			·	-818.2	746.9	1,107.9	4.12	-3.64	-7.27
5,809.0	14.60	132.70	5,681.9		754.8	1,118.2	4.55	~4.09	-8.41
5,853.0	12.80	129.00	5,724.6	-825.1 -831.0	762.2	1,110.2	1.82	-1.82	-0.68
5,897.0	12.00	128.70	5,767.6			1,127.6	0.52	-0.23	2.27
5,941.0	11.90	129.70	5,810.6	-836.7	769.2		2.08	1.82	4.77
5,985.0	12.70	131.80	5,853.6	-842.9	776.3	1,145.9			
6,029.0	13,40	134.70	5,896.5	-849.7	783.5	1,155.8	2.18	1.59	6.59
6,073.0	13.60	136.90	5,939.3	-857.0	790.7	1,166.0	1.25	0.45	5.00
6,117,0	13.30	138.60	5,982.1	-864.6	797.6	1,176.3	1.13	-0.68	3.86
6,161.0	13.20	140.20	6,024.9	-872.3	804.1	1,186.3	0.86	-0.23	3.64
6,205.0	13.20	140.50	6,067.7	-880.0	810.6	1,196.4	0.16	0.00	0.68
	12.90	139.80	6,110.6	-887.6	816.9	1,206.3	0.77	-0.68	-1.59
6,249.0	12.40	138.70	6,153.5	-894.9	823.2	1,215.9	1,26	-1.14	-2,50
6,293.0		136.60	6,196.6	-901.7	829.4	1,225.1	1.88	-1.59	-4.77
6,337.0	11.70			-908.1	835.4	1,233.9	0.91	-0.91	0,45
6,381.0	11.30	136.80	6,239.7		841.1	1,233.9	1.65	0.00	8.41
6,425.0	11.30	140.50	6,282.8	-914.6					
6,467.0	10.30	141.15	6,324.1	-920.7	846.1	1,250.4	2.40	-2.38	1.55
6,521.0	10.30	141.15	6,377.2	-928.2 ◆	→ 852.1	1,260.0	0.00	0.00	0.00

Checked By:	Approved By:	Date:	



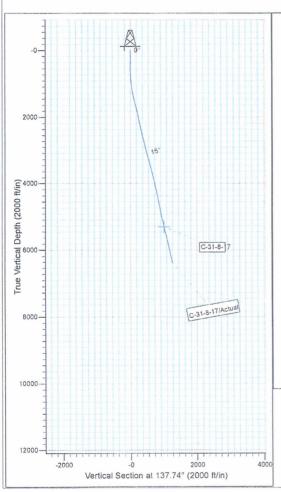
Project: USGS Myton SW (UT) Site: SECTION 30 T8S, R17E Well: C-31-8-17 Wellbore: Wellbore #1

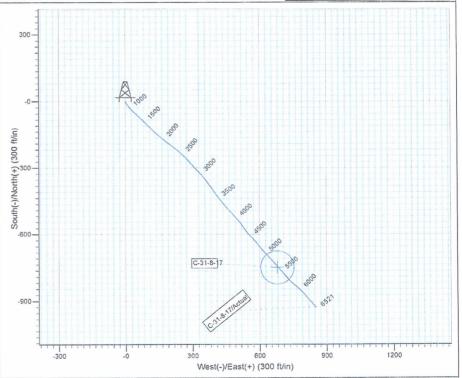
Design: Actual



Azimuths to True North Magnetic North: 11.38°

Magnetic Field Strength: 52345.5snT Dip Angle: 65.84° Date: 12/9/2010 Model: IGRF2010







Design: Actual (C-31-8-17/Wellbore #1)

Created By: Barah Well Date: 15:40, February 18 2012

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA